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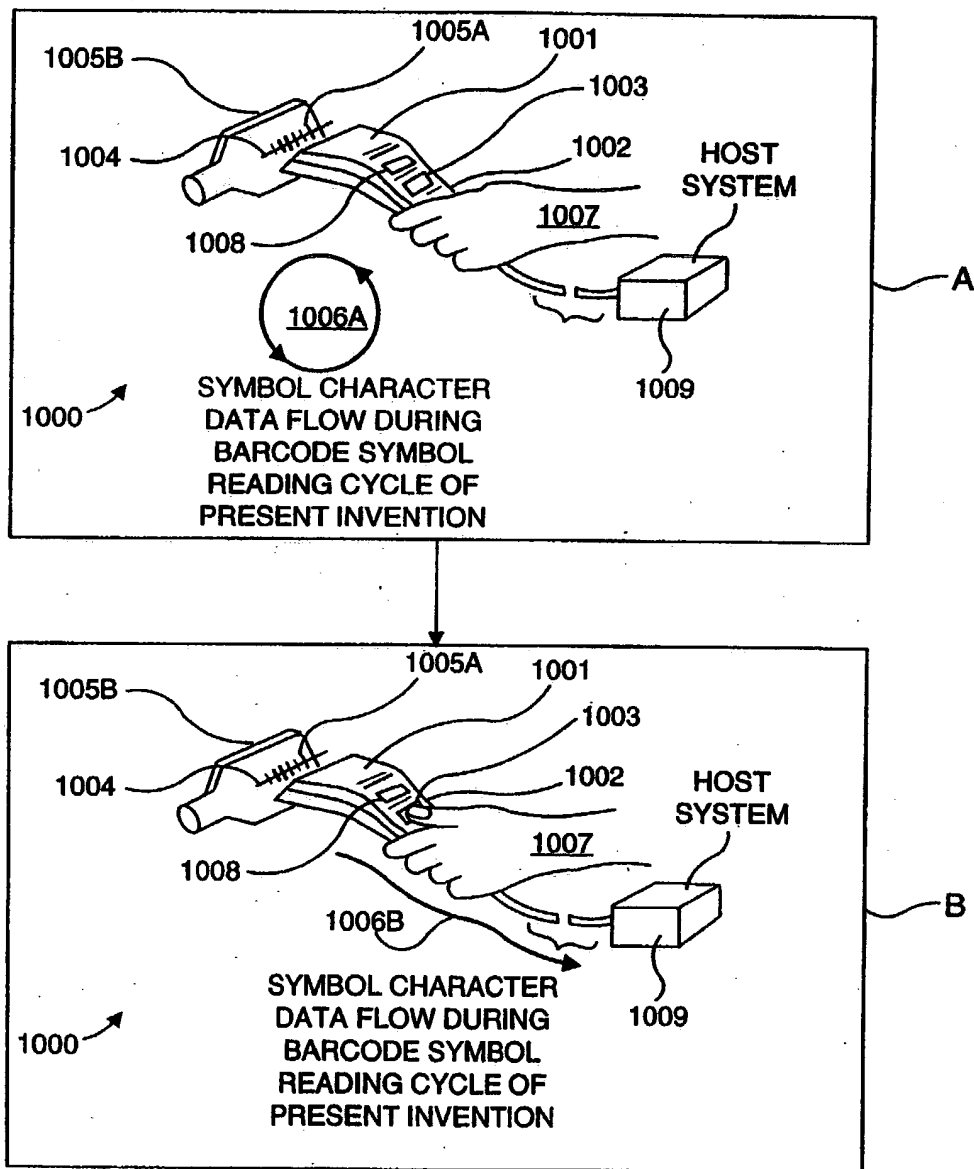


FIG. 1

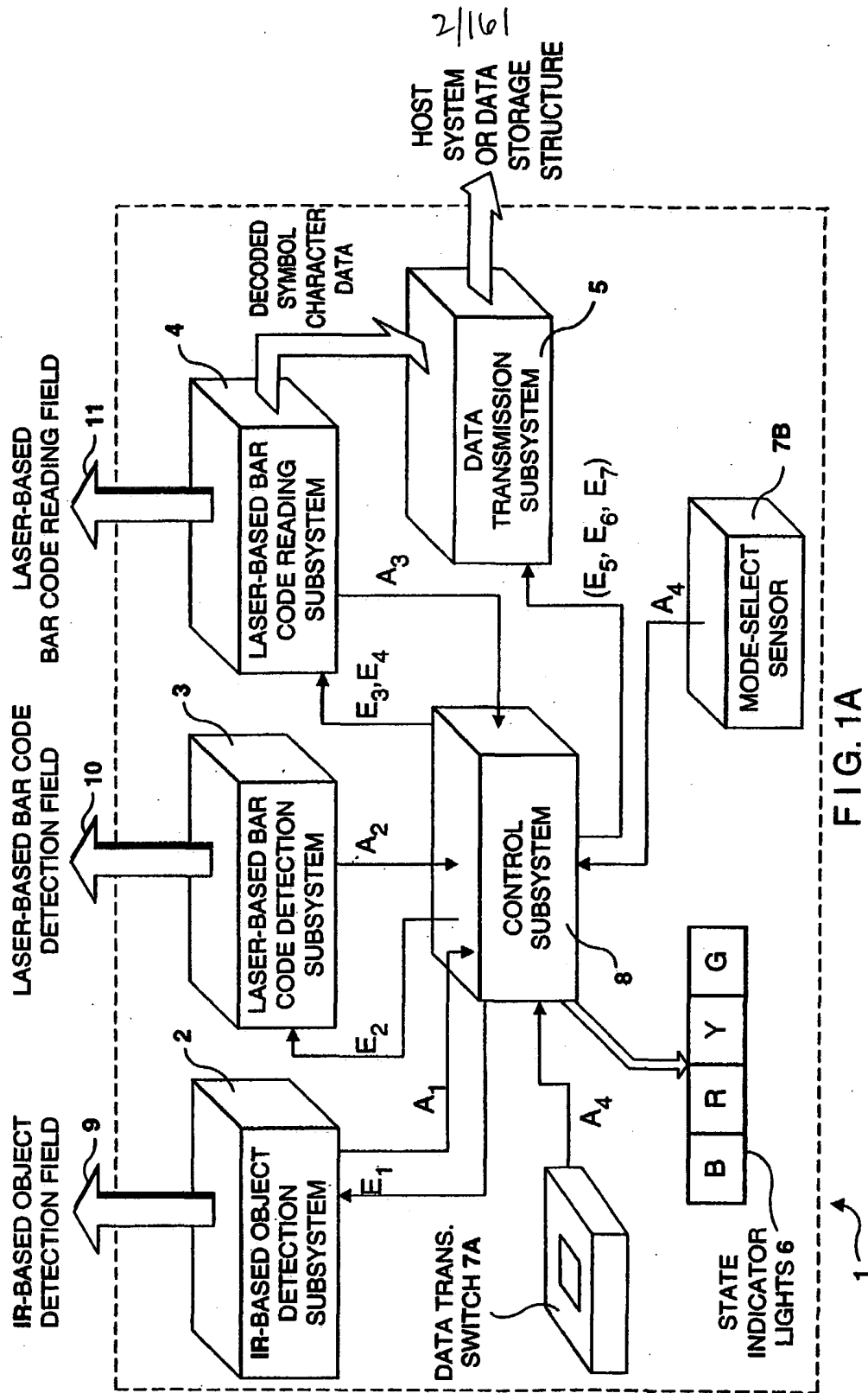


FIG. 1A

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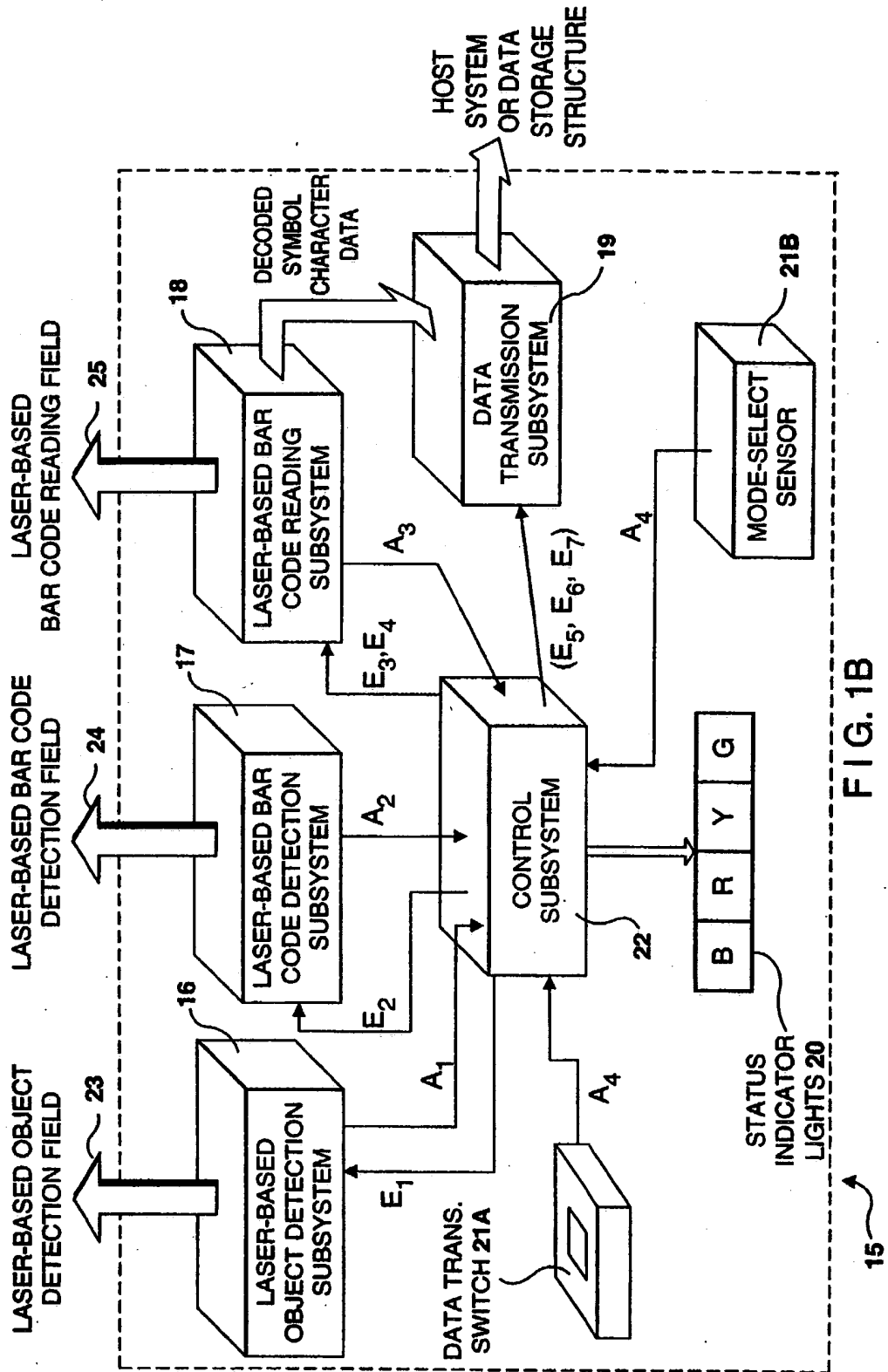
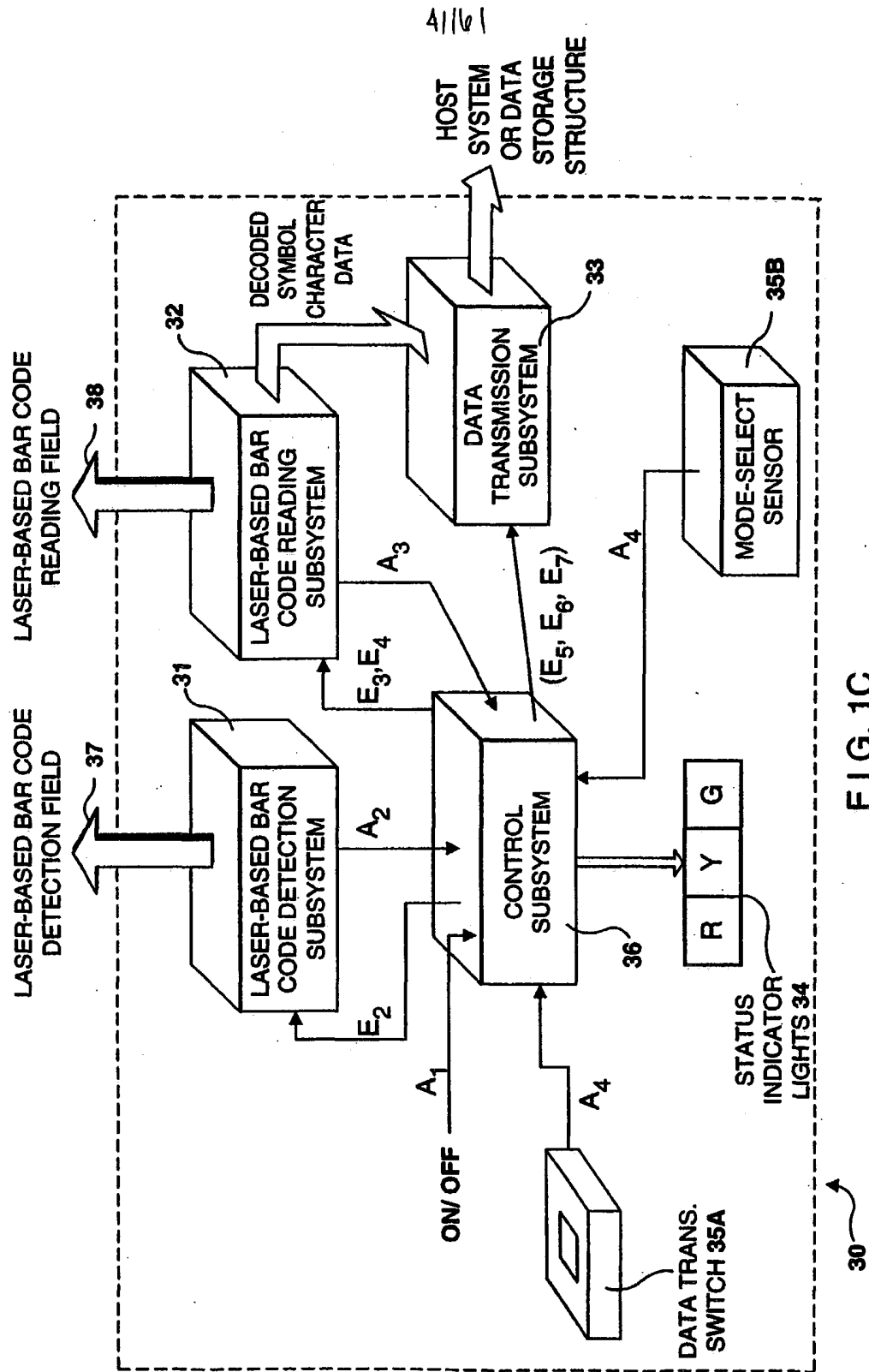


FIG. 1B



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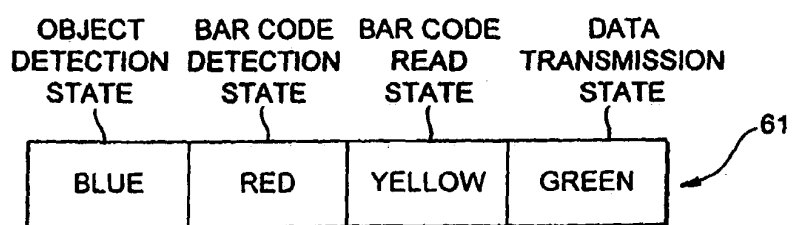
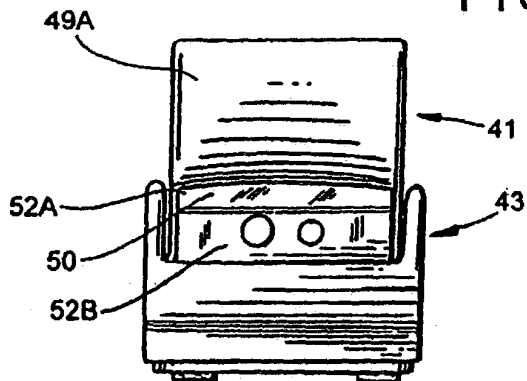
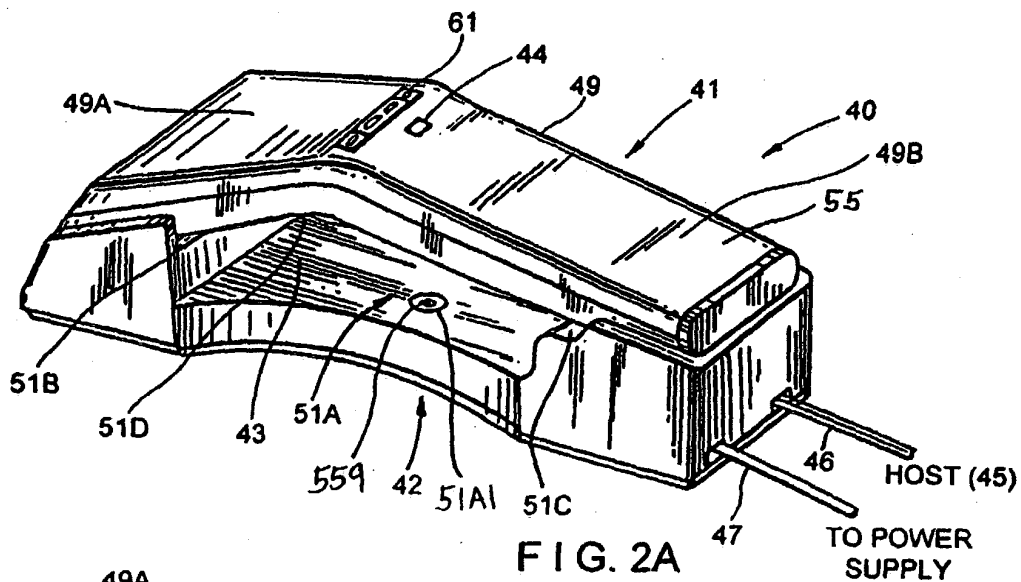


FIG. 2C

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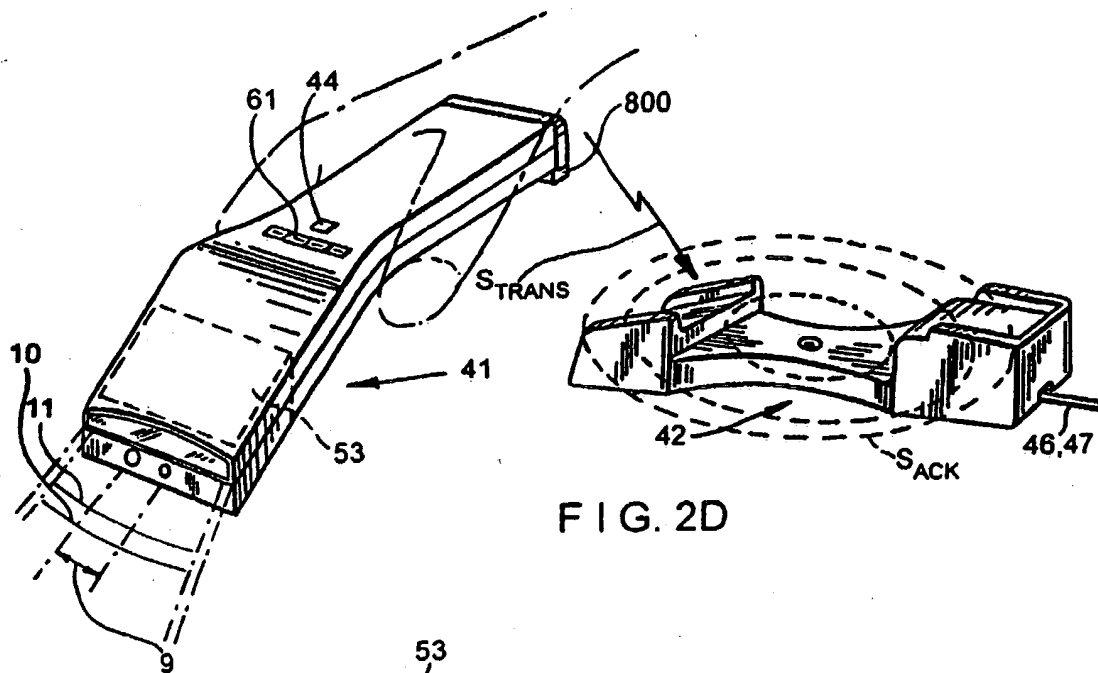


FIG. 2D

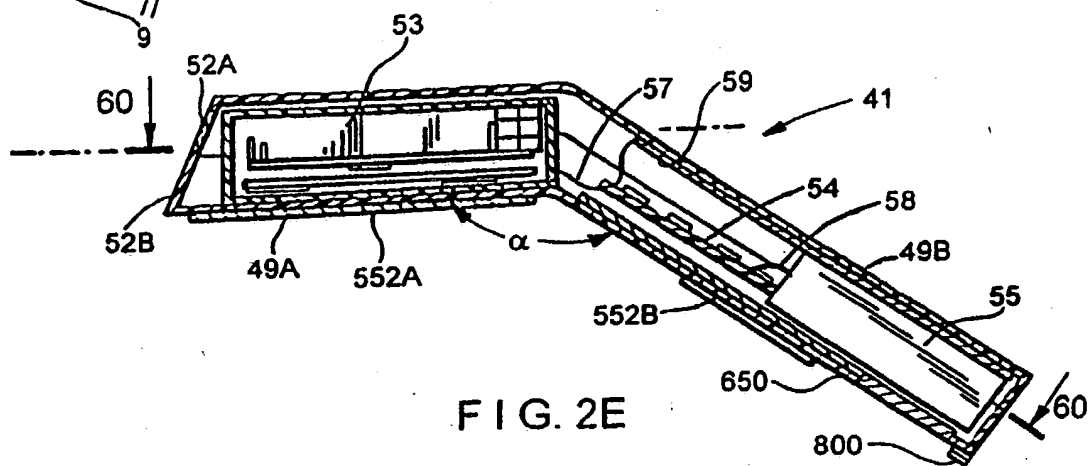


FIG. 2E

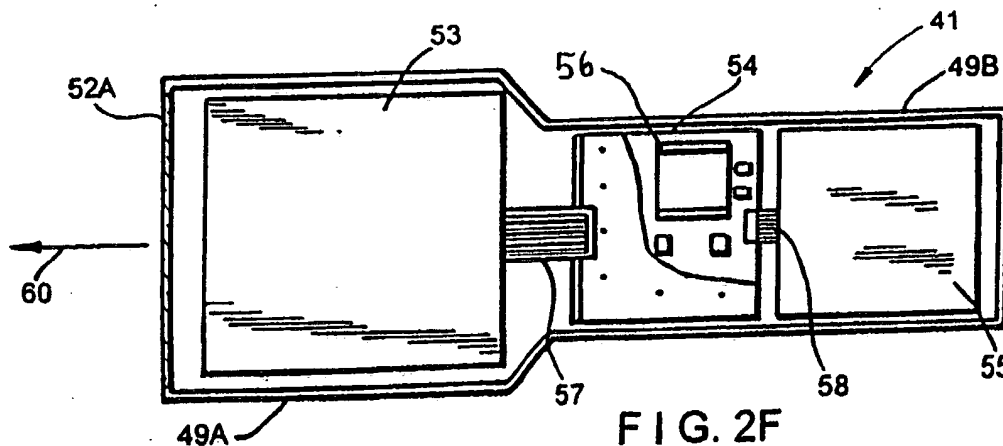


FIG. 2F

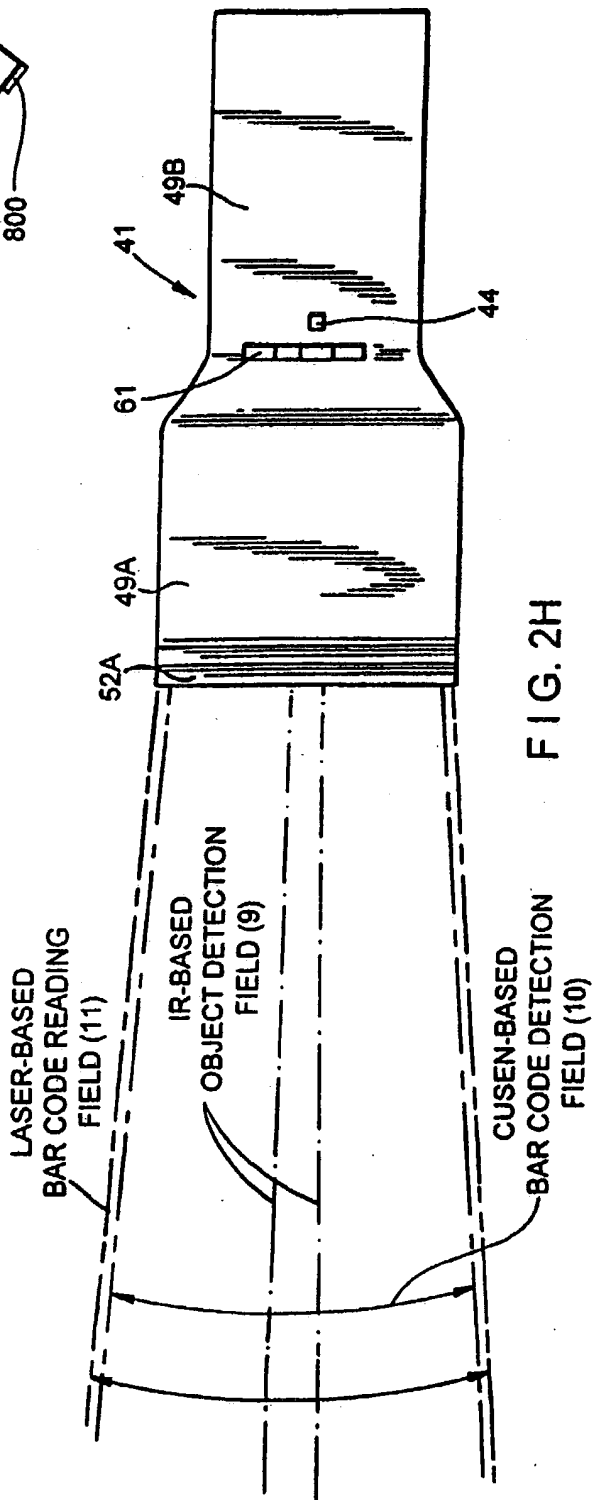
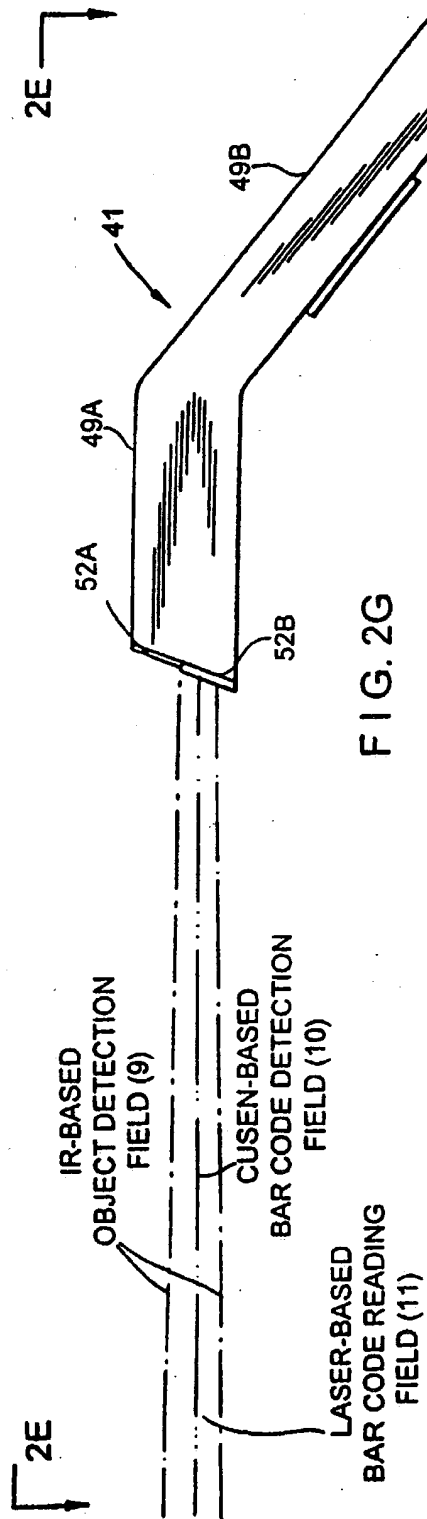


FIG. 2J

FIG. 3B

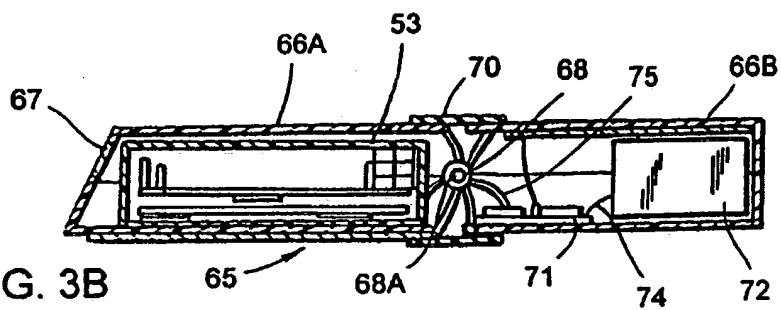


FIG. 3B

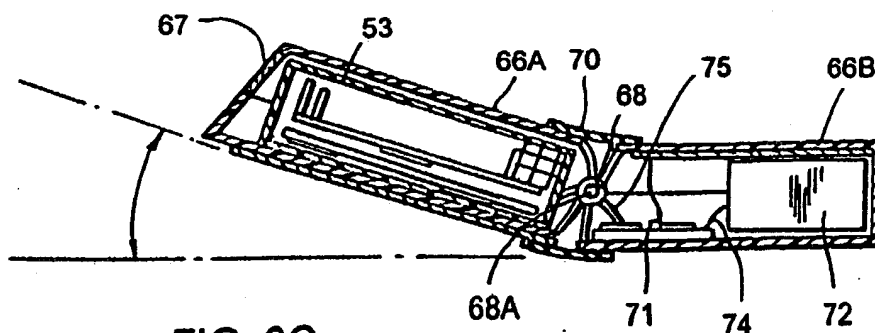


FIG. 3C

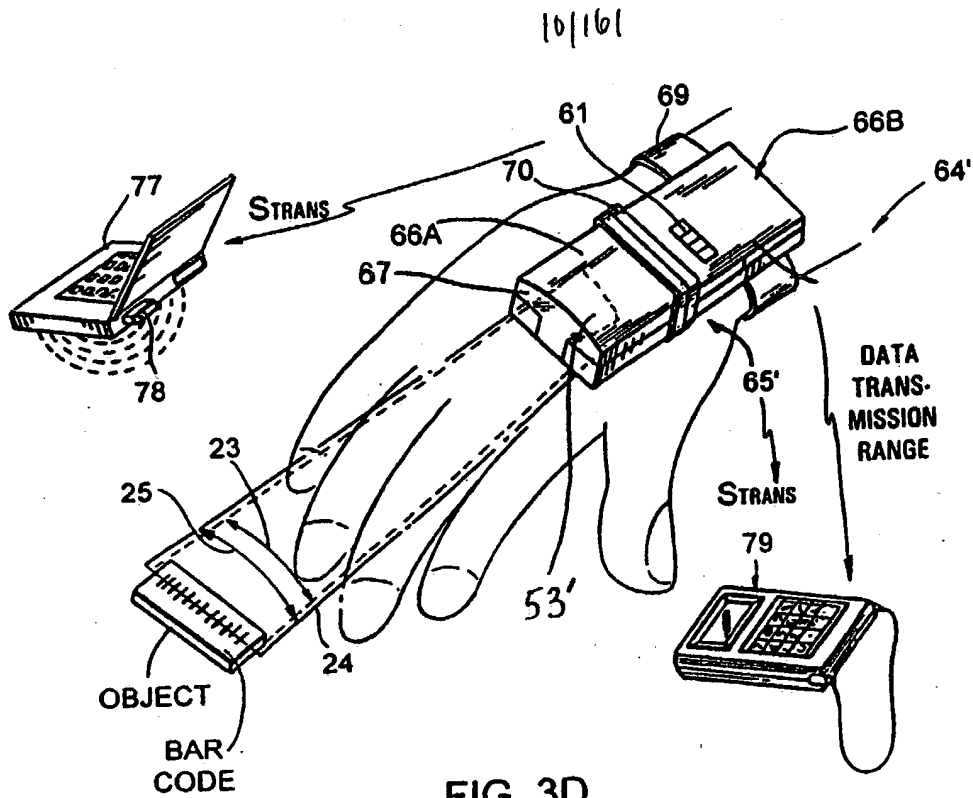


FIG. 3D

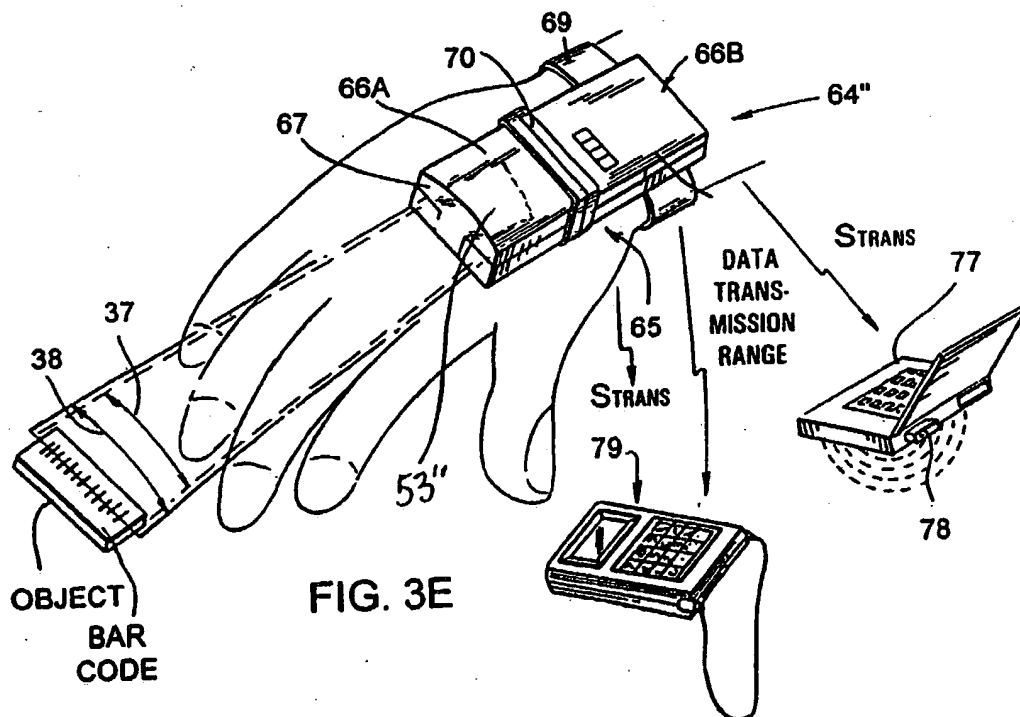


FIG. 3E

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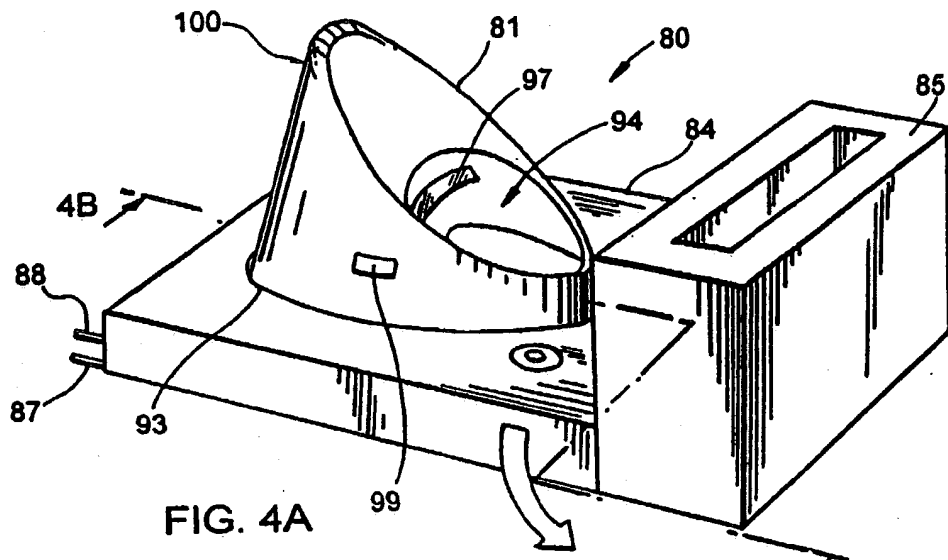


FIG. 4A

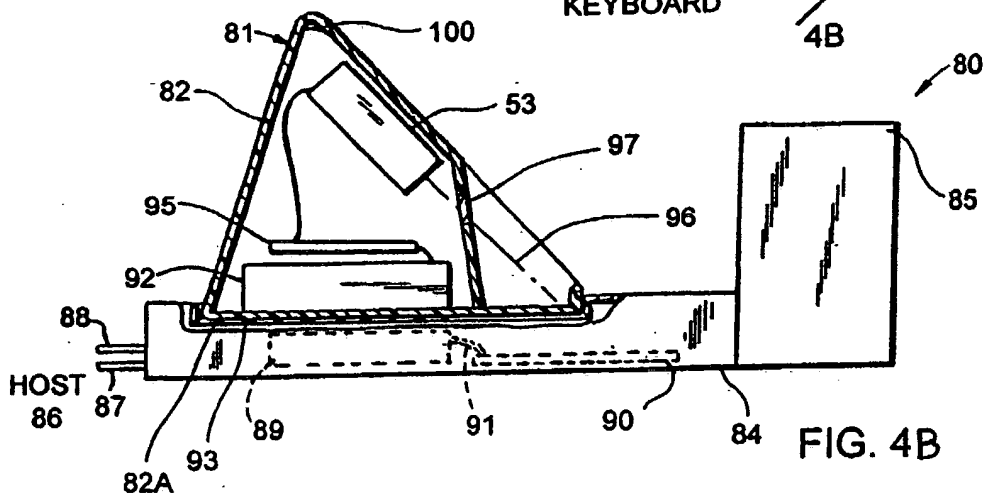


FIG. 4B

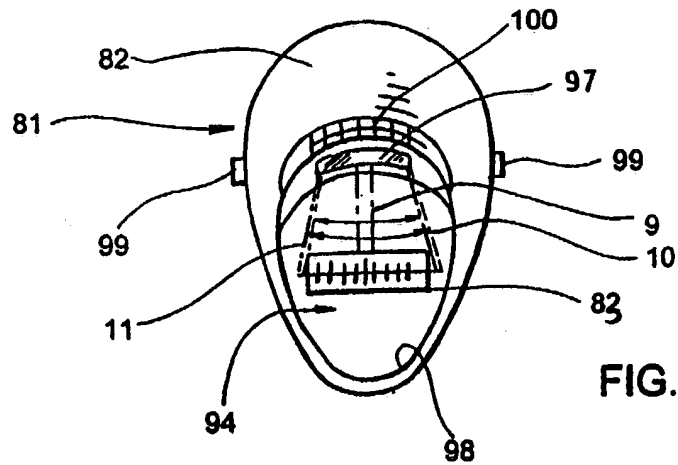
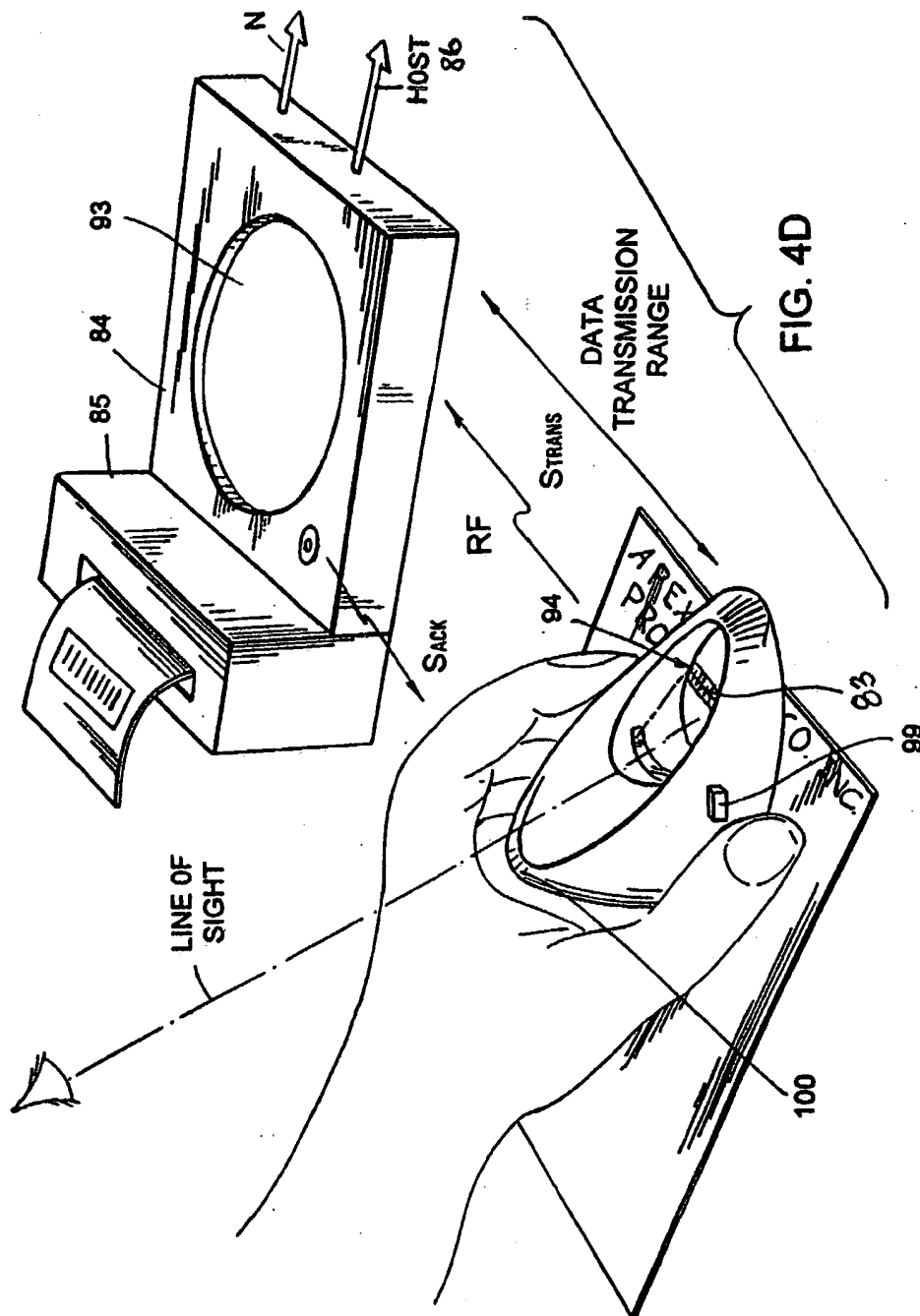


FIG. 4C

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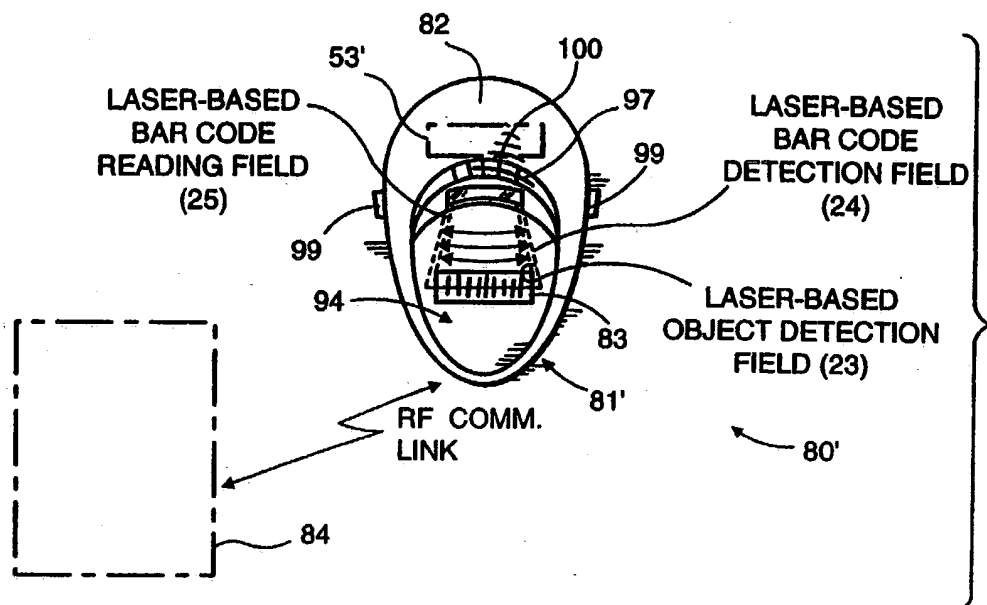


FIG. 4E

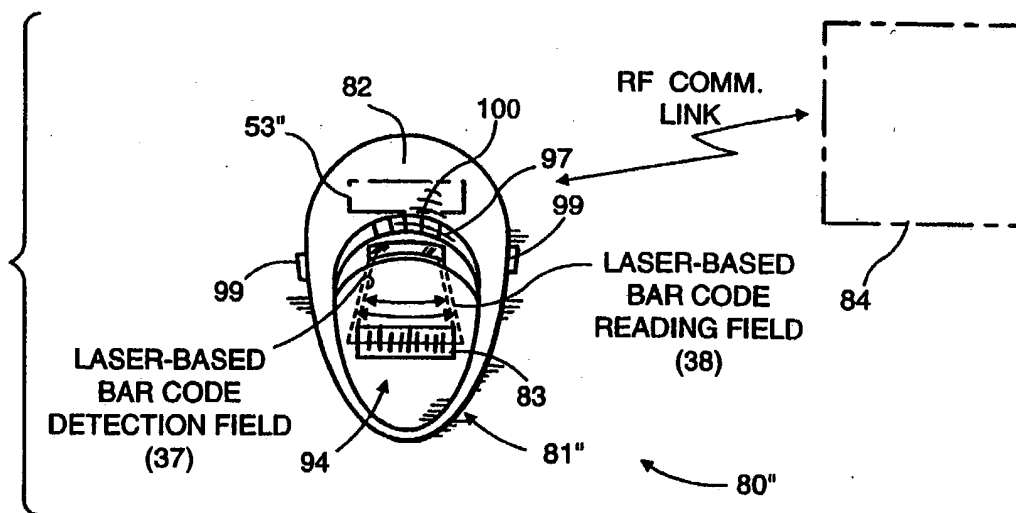


FIG. 4F

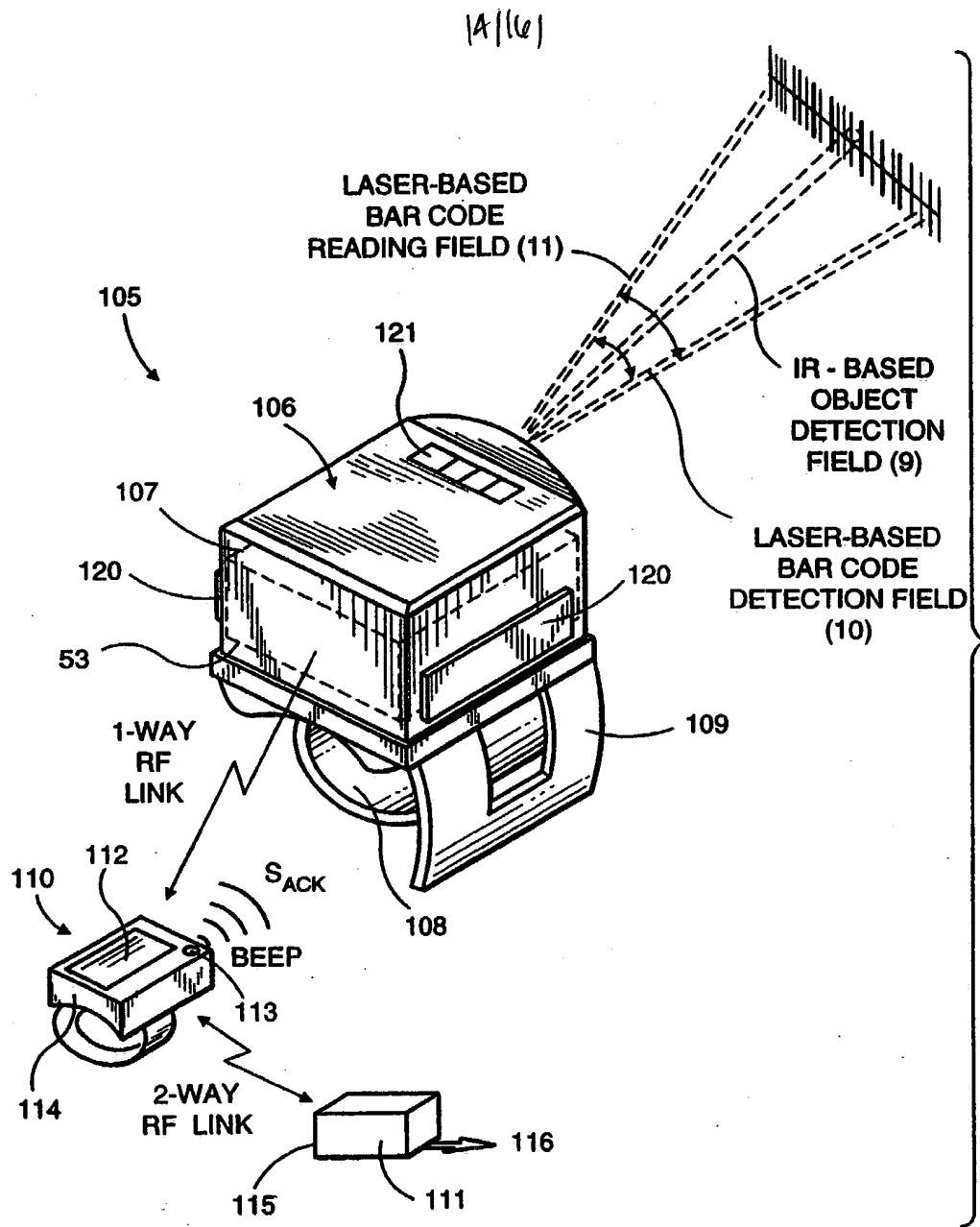


FIG. 5A

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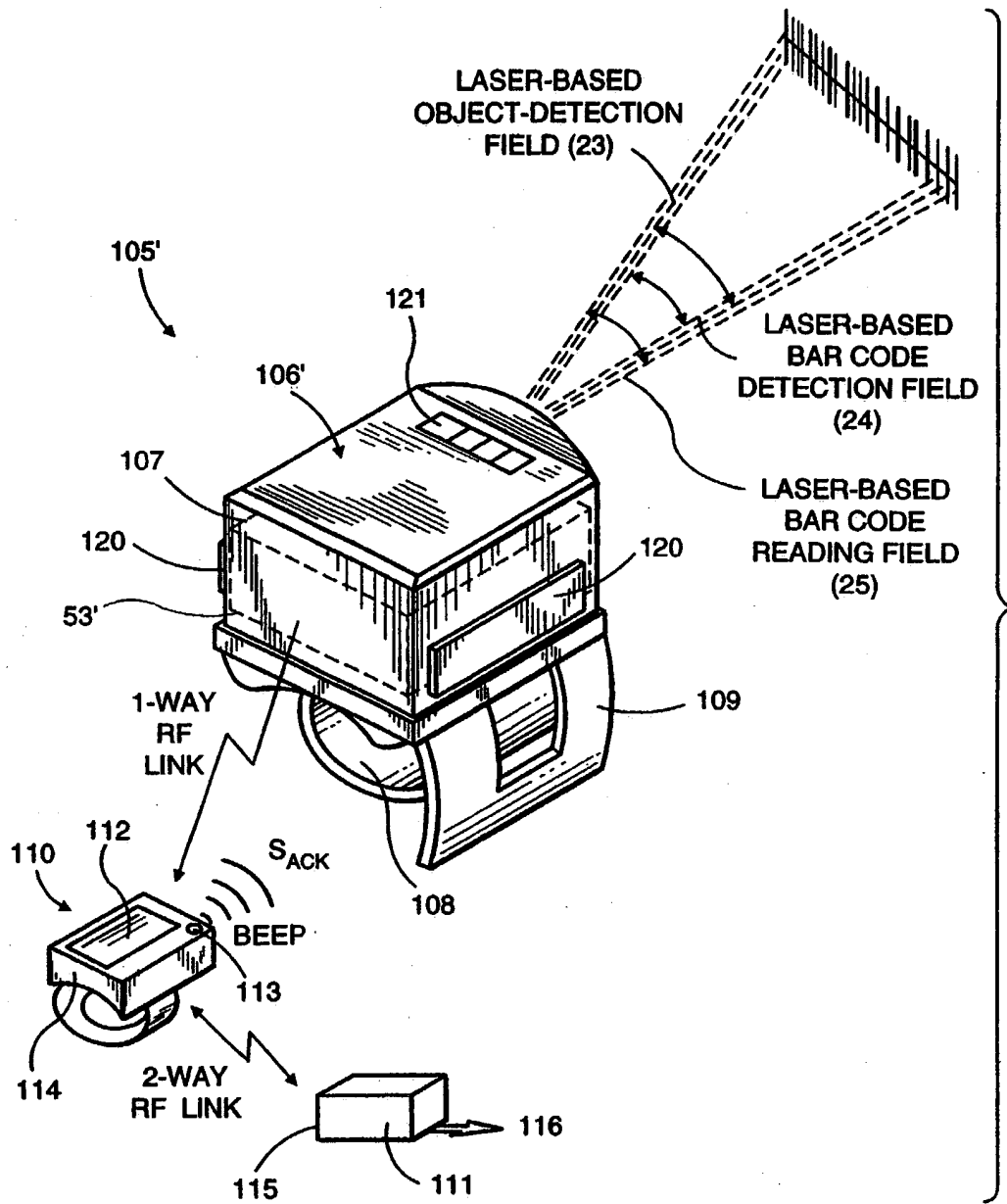


FIG. 5B

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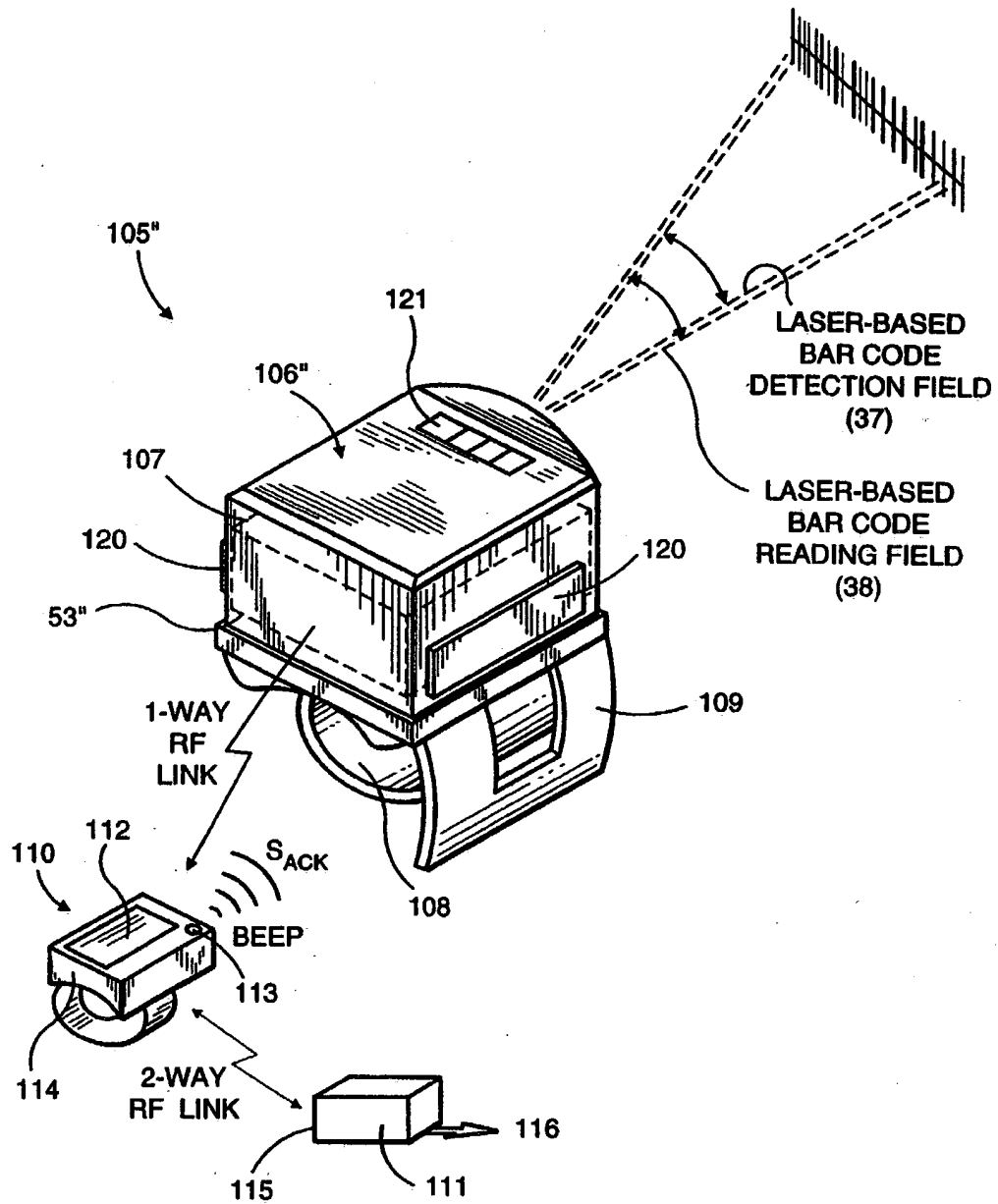


FIG. 5C

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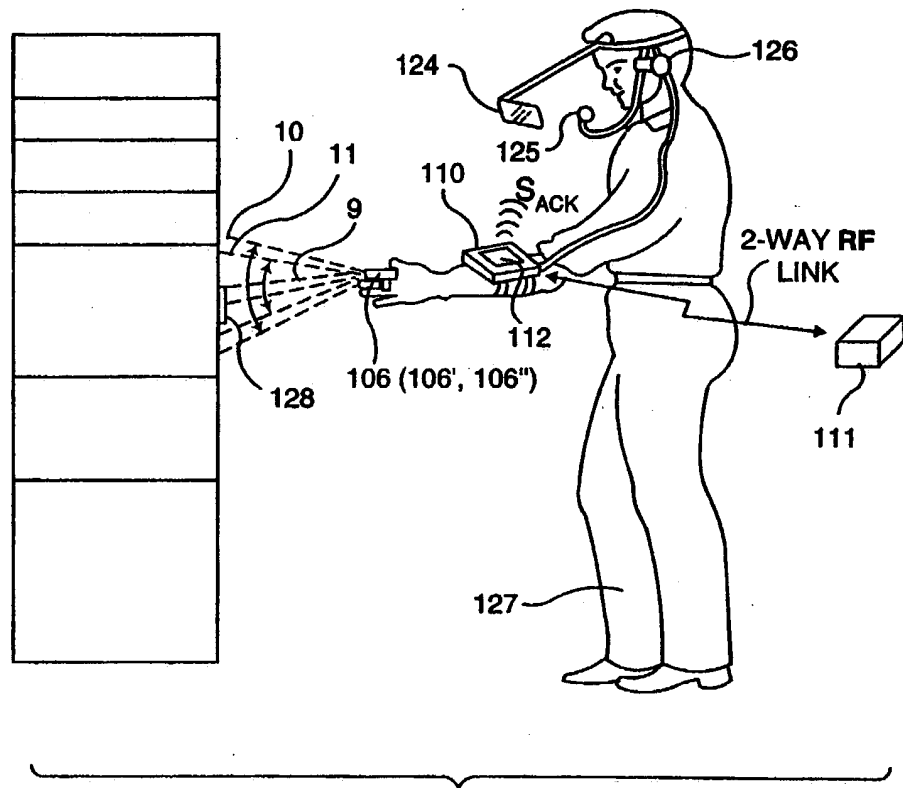


FIG. 5D

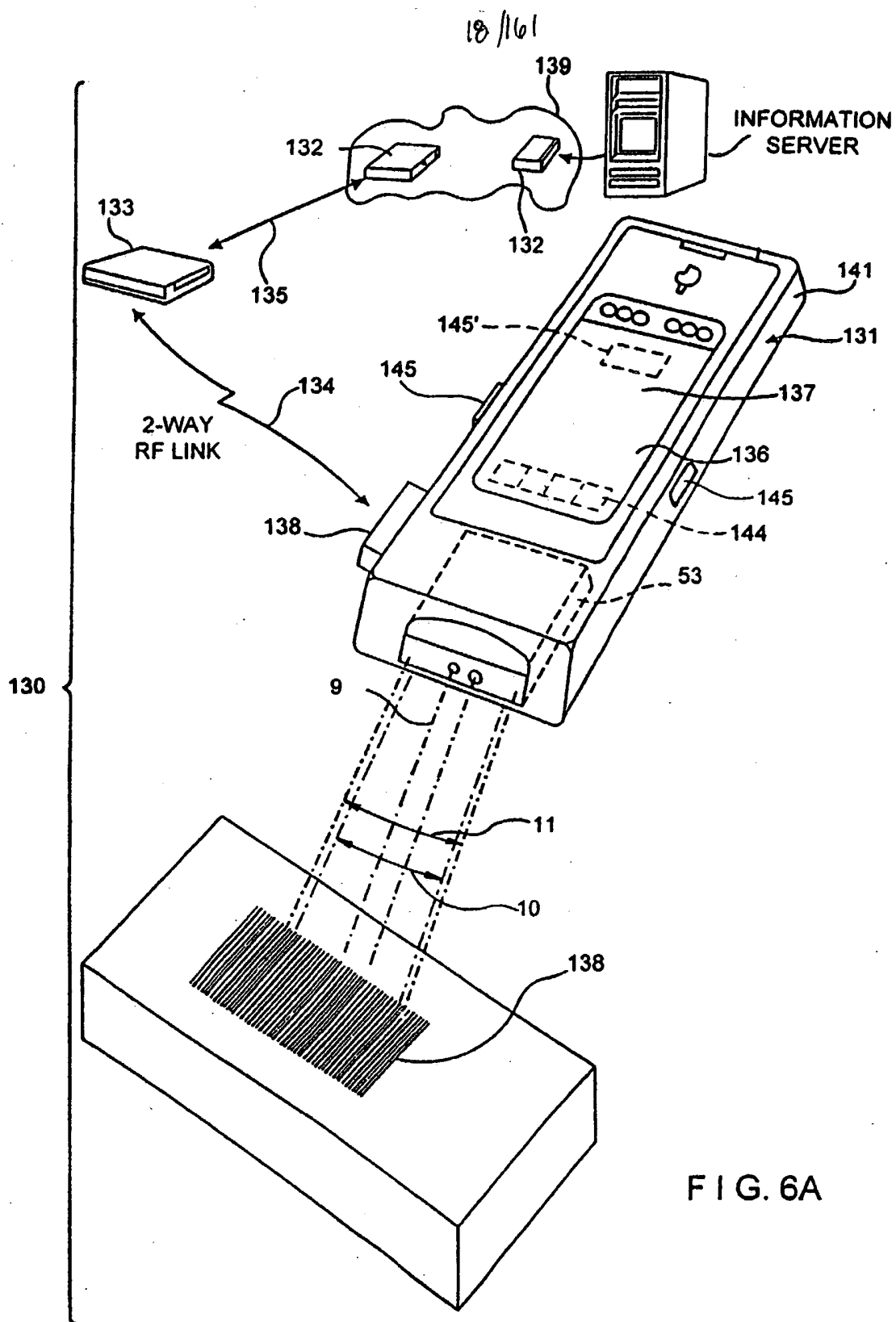


FIG. 6A

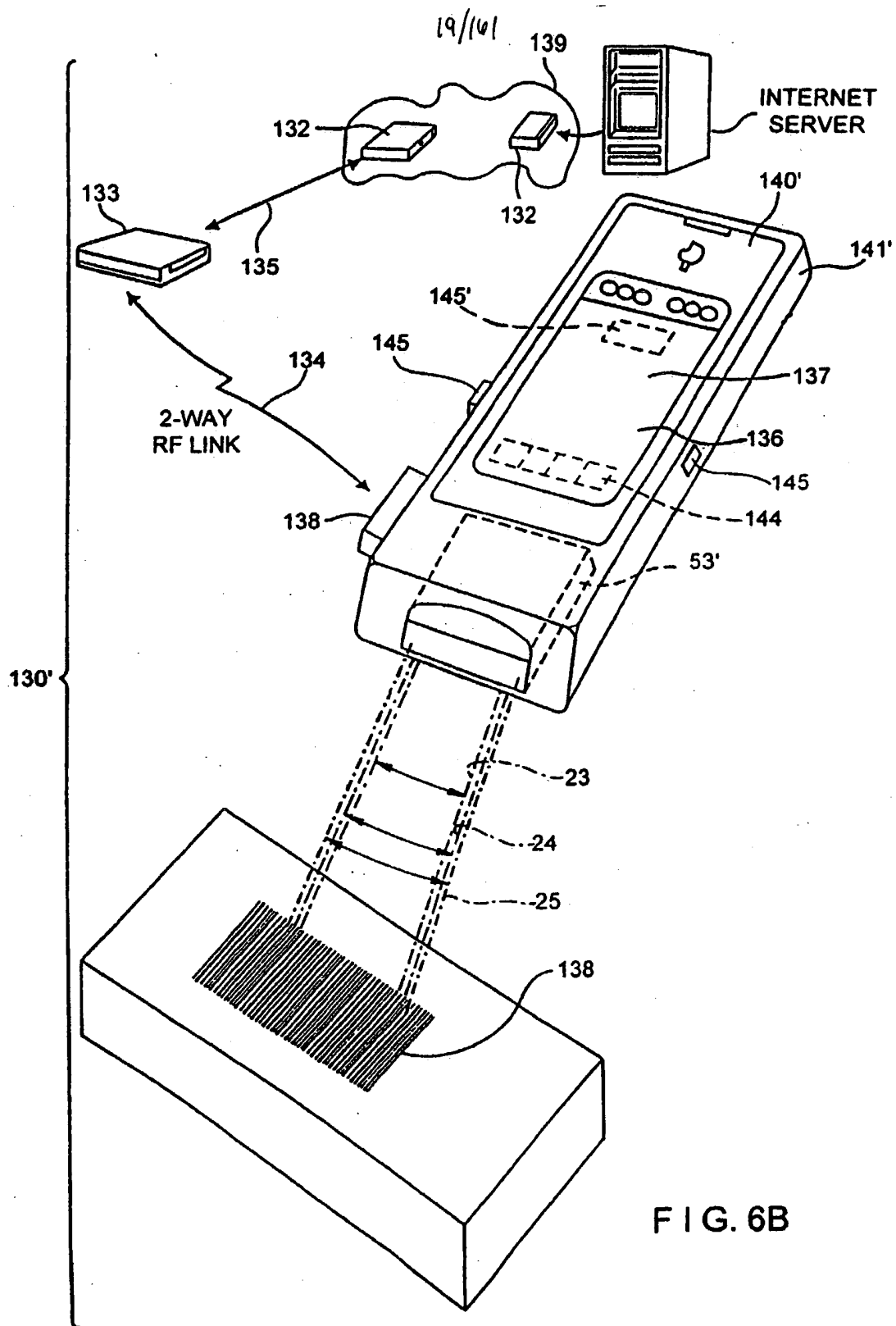
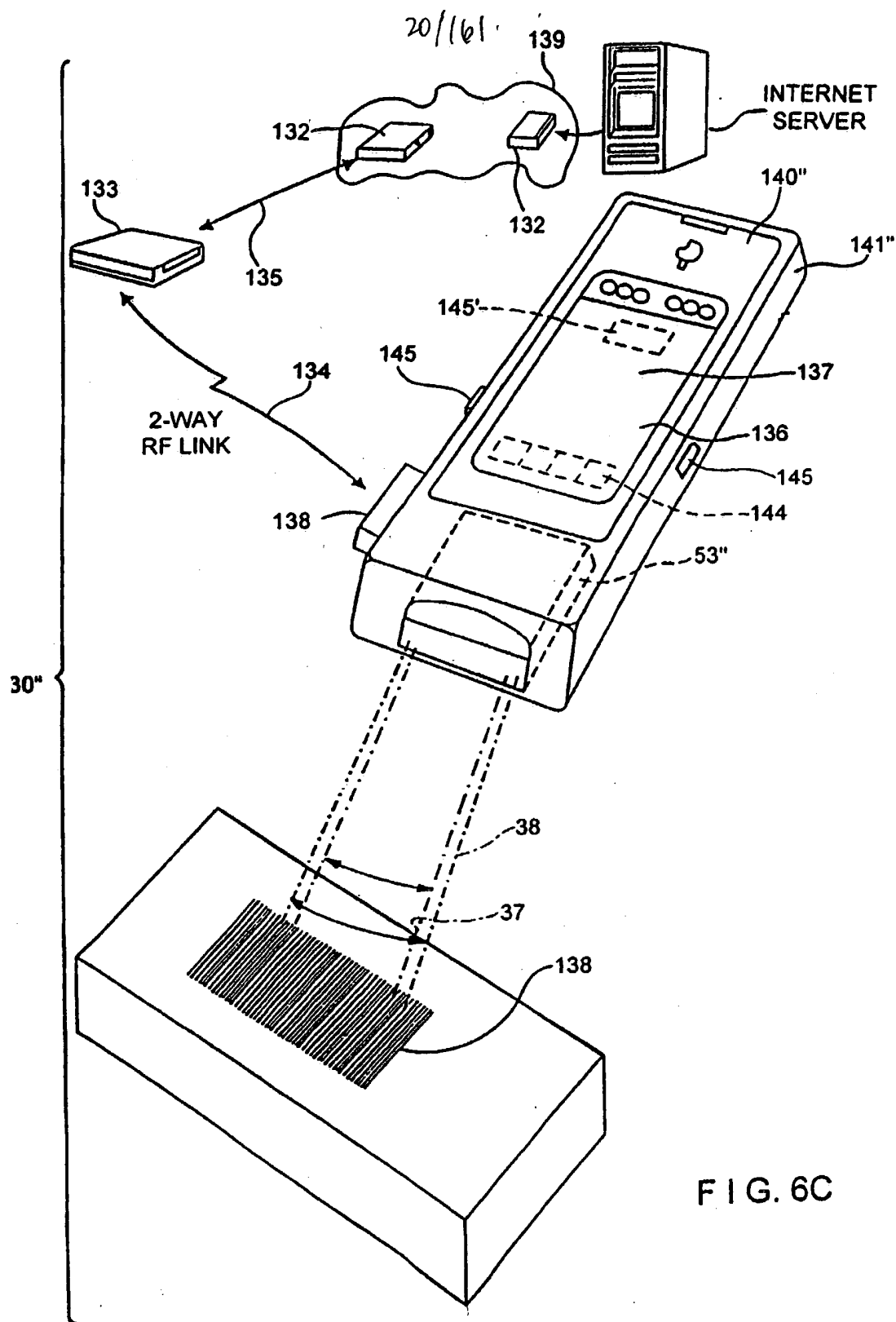


FIG. 6B



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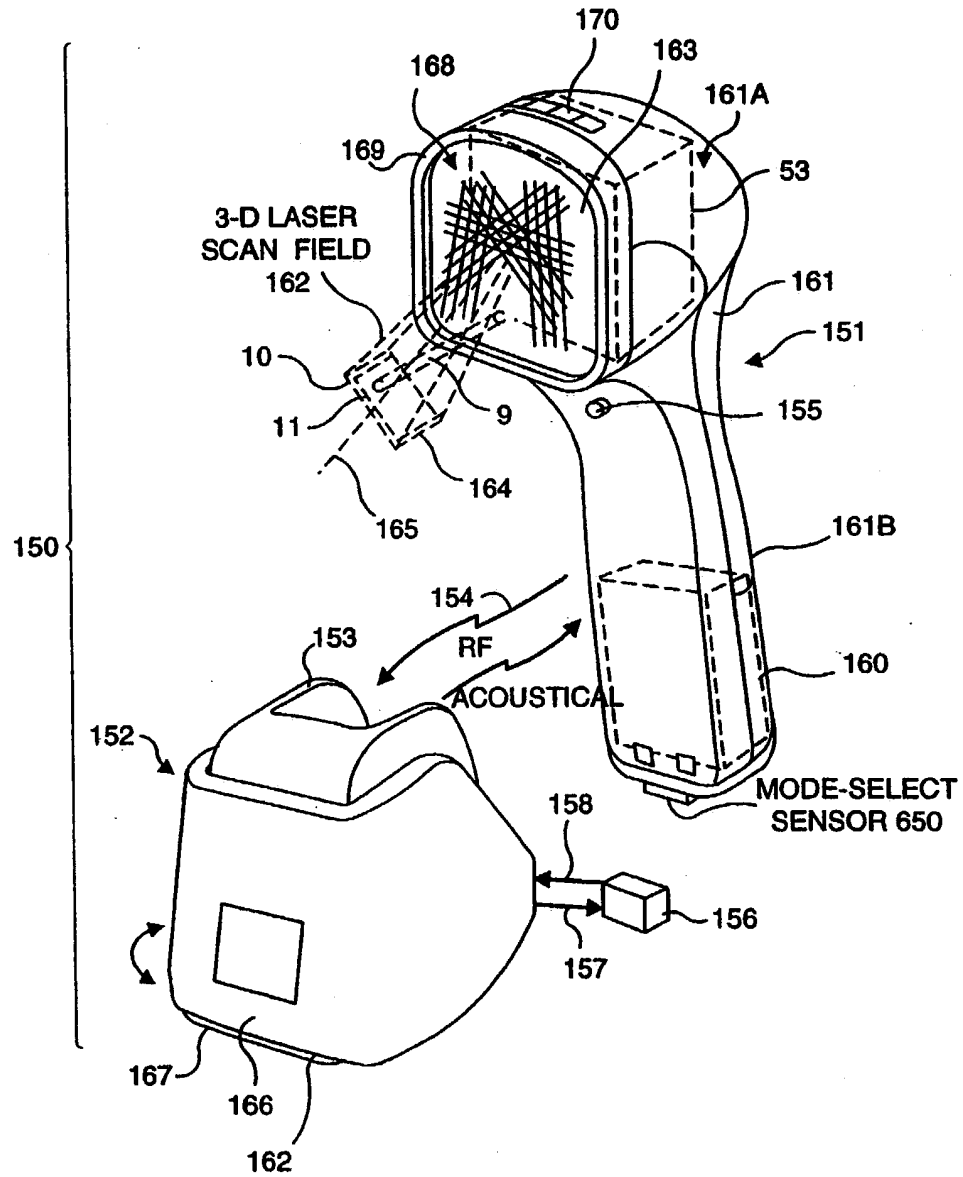


FIG. 7A

/

FIG. 7C

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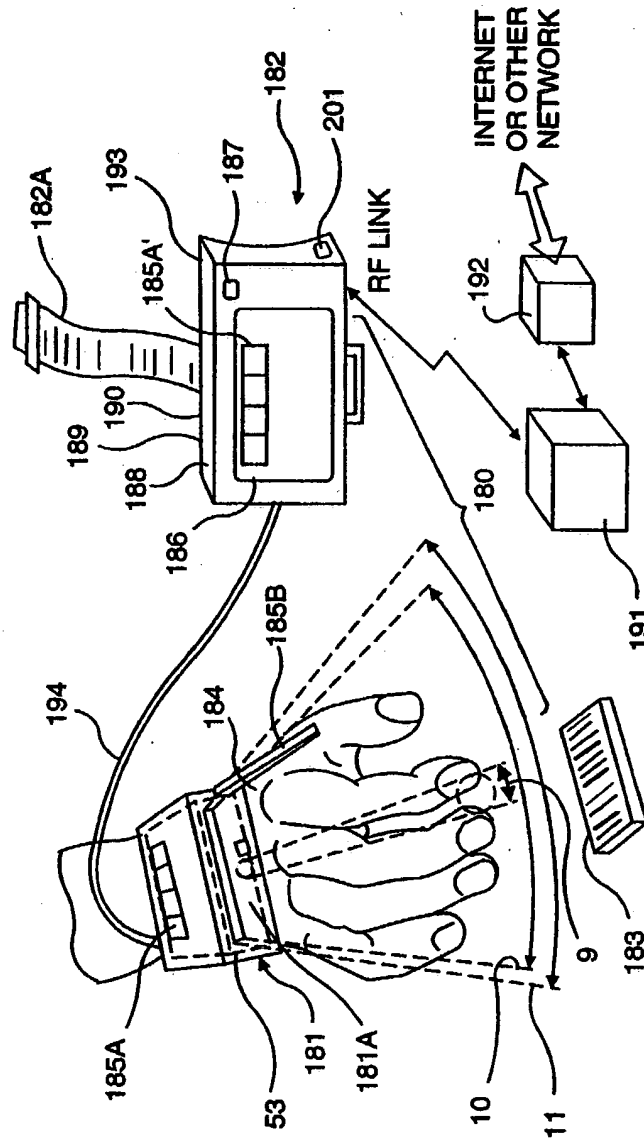


FIG. 8A

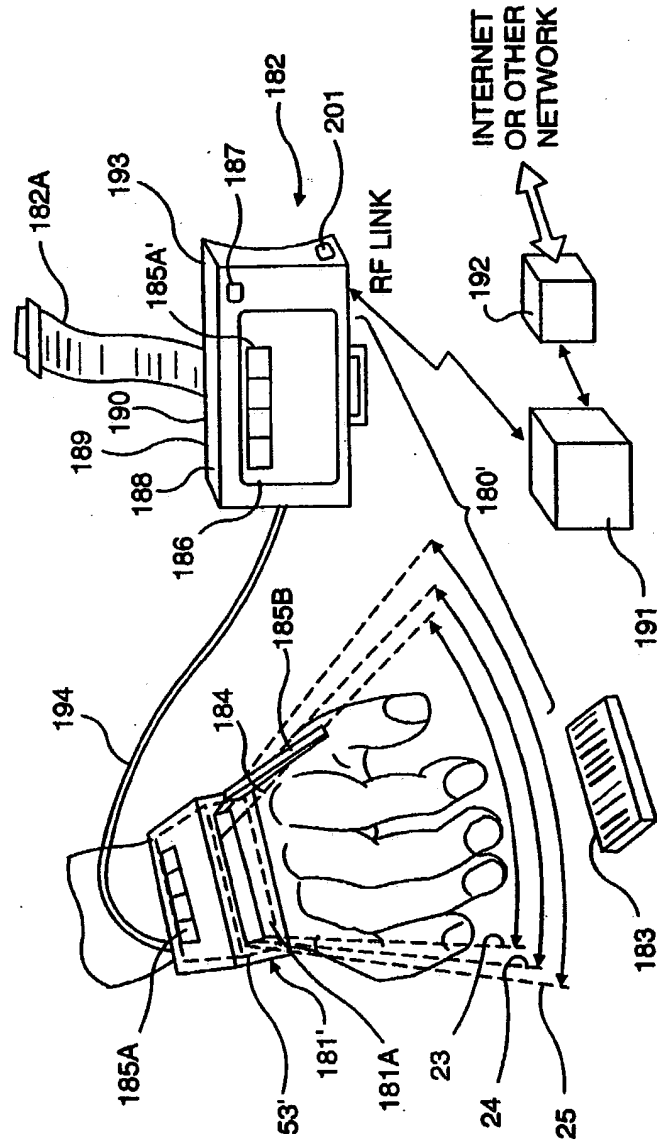


FIG. 8B

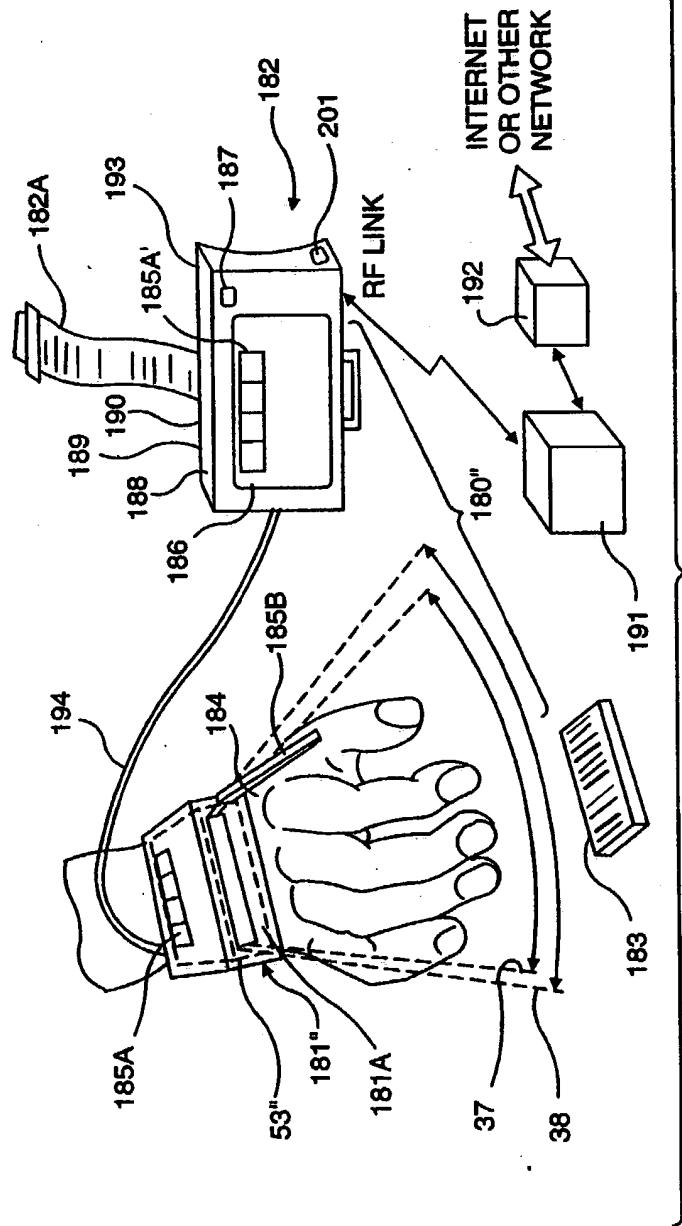


FIG. 8C

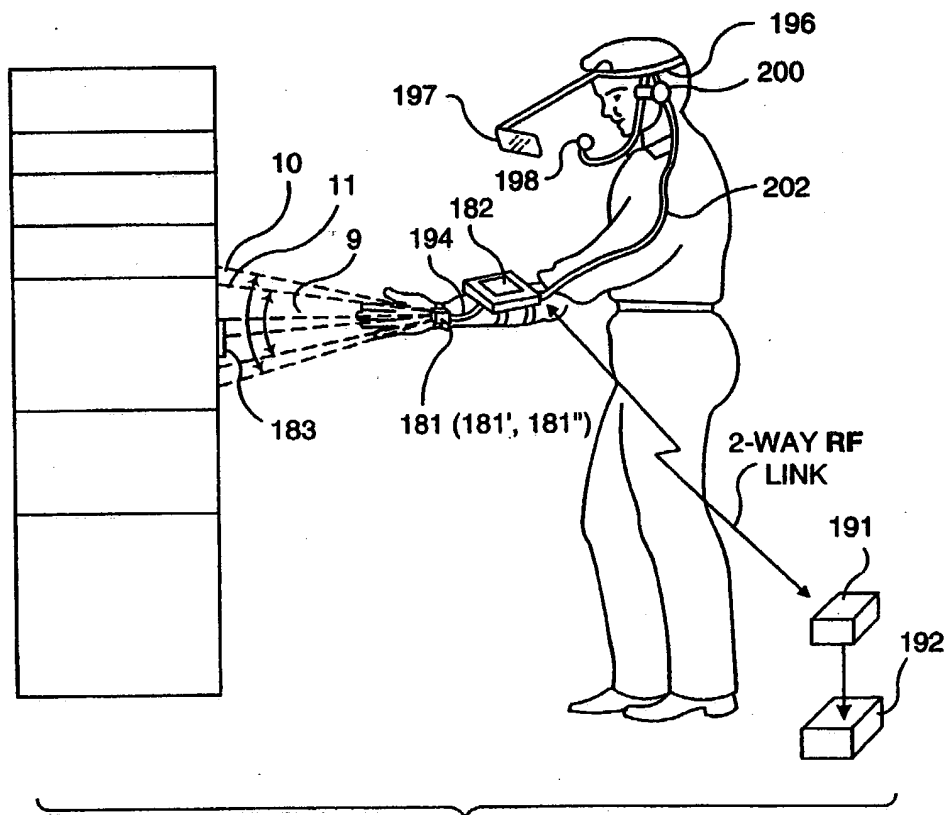
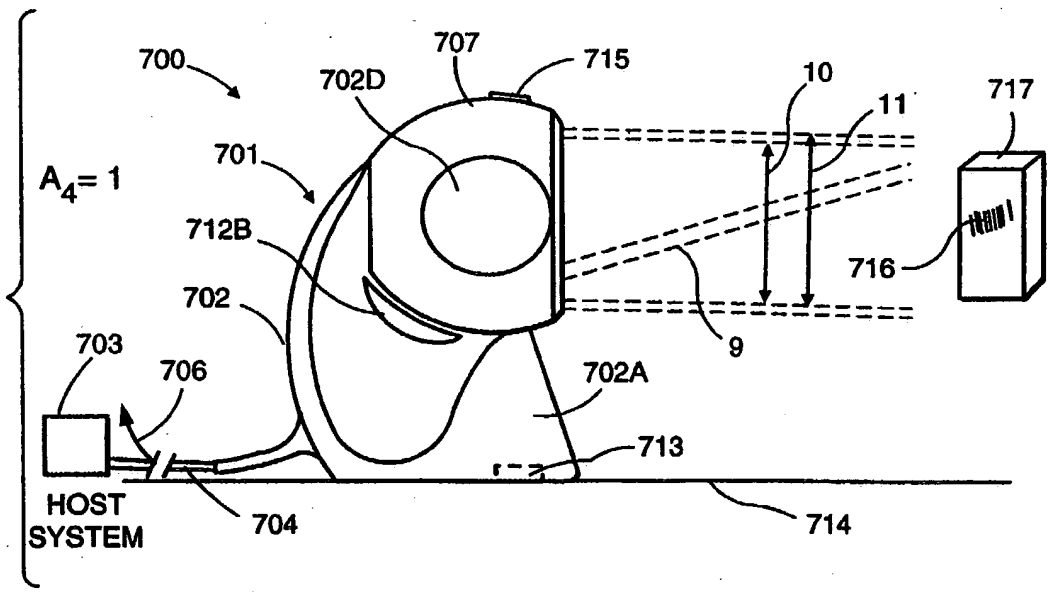
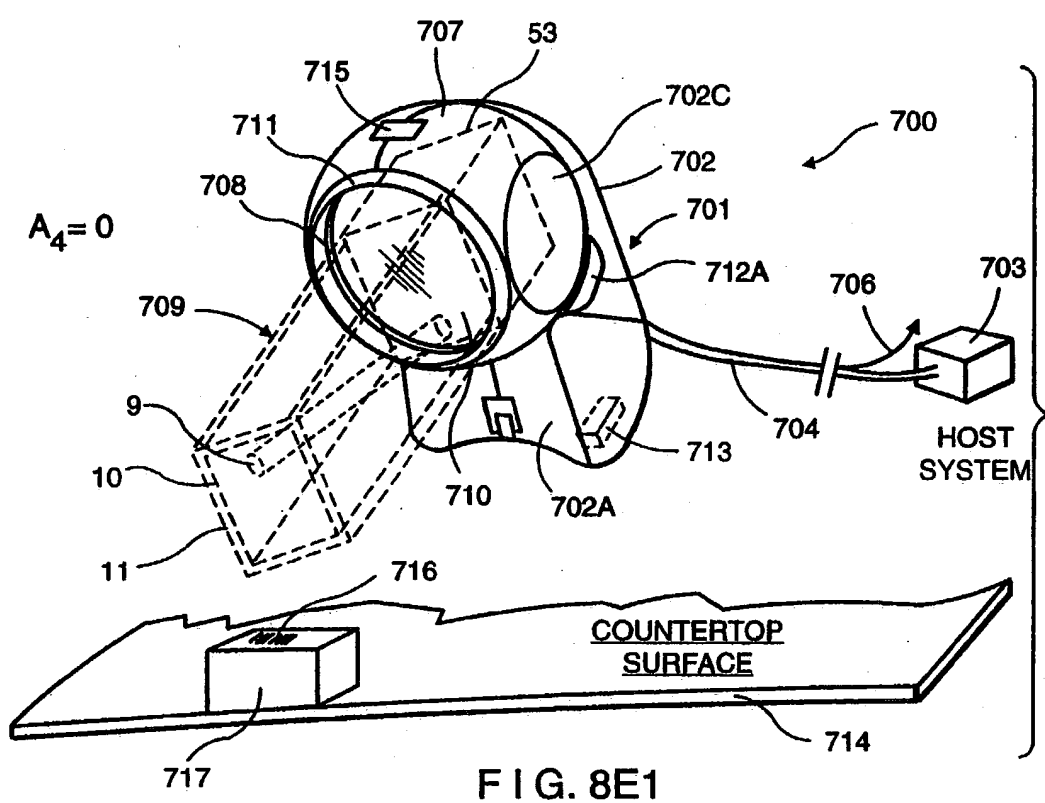


FIG. 8D

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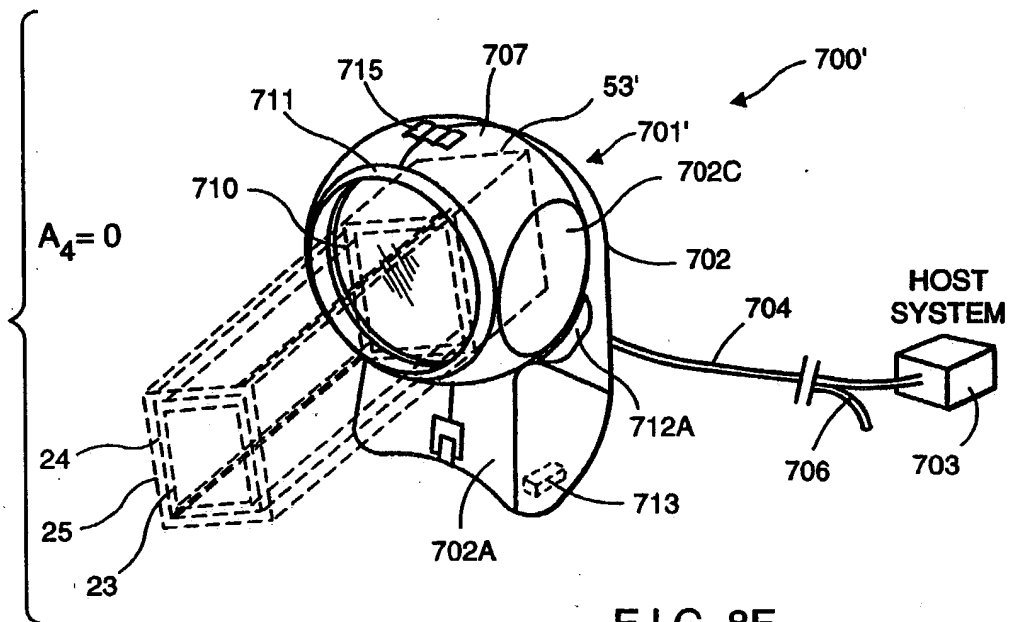


FIG. 8F

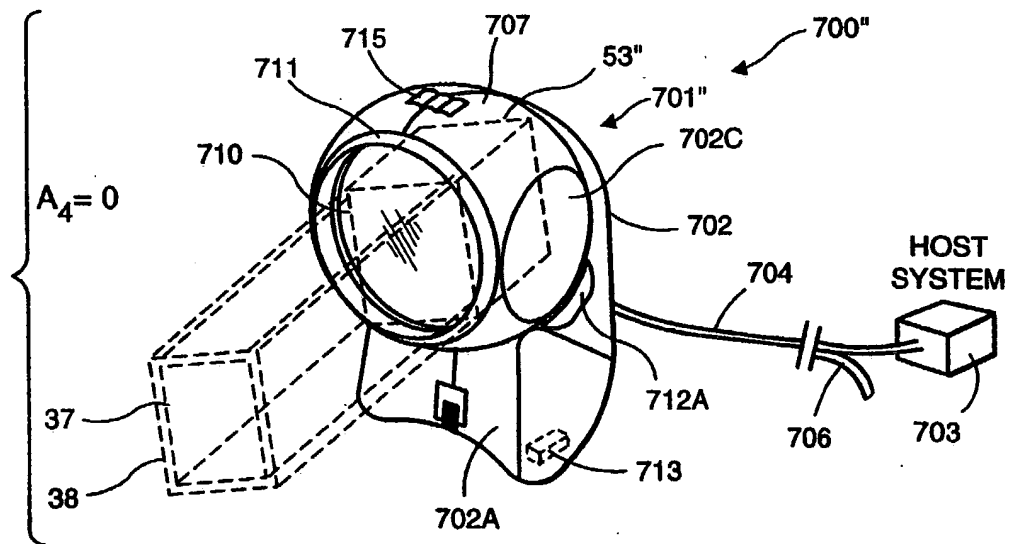


FIG. 8G

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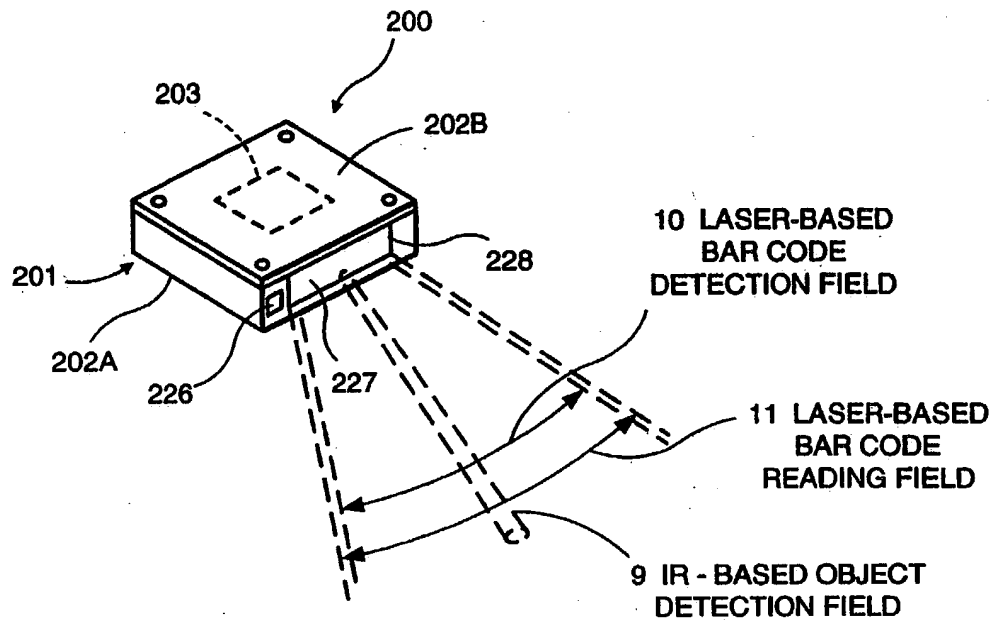


FIG. 9A

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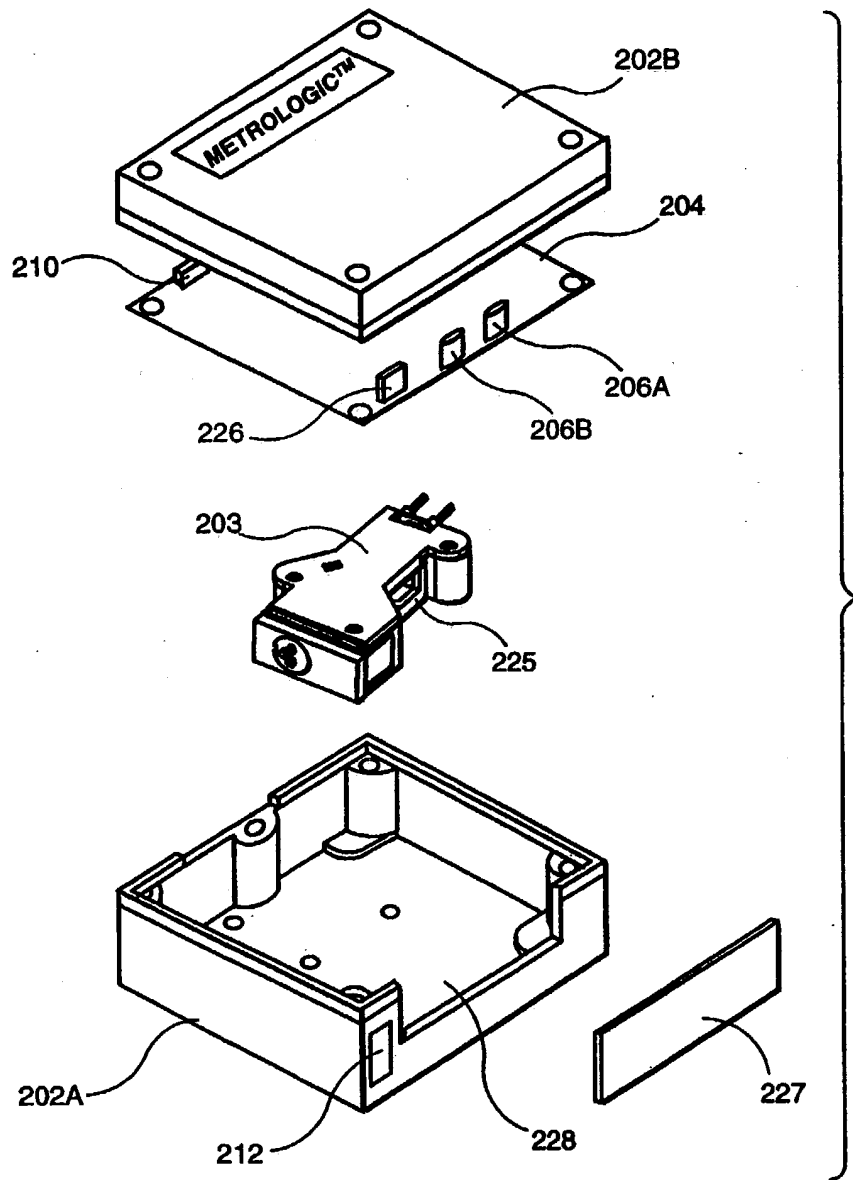


FIG. 9B

This exploded perspective view illustrates the assembly of a mechanical device. The components are labeled as follows:

- 203**: Points to the main housing or base assembly.
- 204**: A rectangular block component.
- 205**: A small circular component with a central pin.
- 205A**: A small circular component with a central pin, similar to 205.
- 206**: A long rectangular plate with a central hole.
- 207**: A circular component with a central pin, similar to 205.
- 208**: A rectangular block component.
- 208A**: A rectangular block component.
- 208B**: A rectangular block component.
- 208D**: A rectangular block component.
- 208E**: A rectangular block component.
- 209A**: A rectangular block component.
- 209B**: A rectangular block component.
- 210**: A rectangular block component.
- 211**: A rectangular block component.
- 212**: A rectangular block component.
- 213**: A rectangular block component.
- 214**: A rectangular block component.
- 215**: A rectangular block component.
- 216**: A circular component with a central pin.
- 217**: A rectangular block component.
- 219**: A rectangular block component.
- 220**: A rectangular block component.
- 221A**: A rectangular block component.
- 221B**: A rectangular block component.
- 222**: A rectangular block component.
- 223**: A rectangular block component.
- 224**: A rectangular block component.
- 225**: A rectangular block component.

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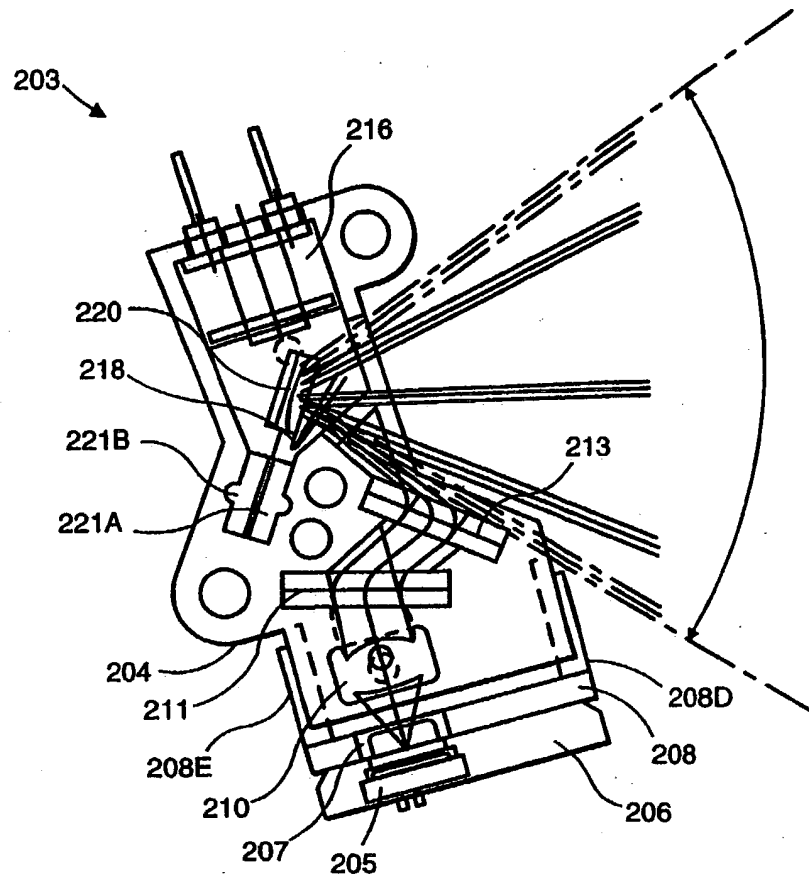


FIG. 9D

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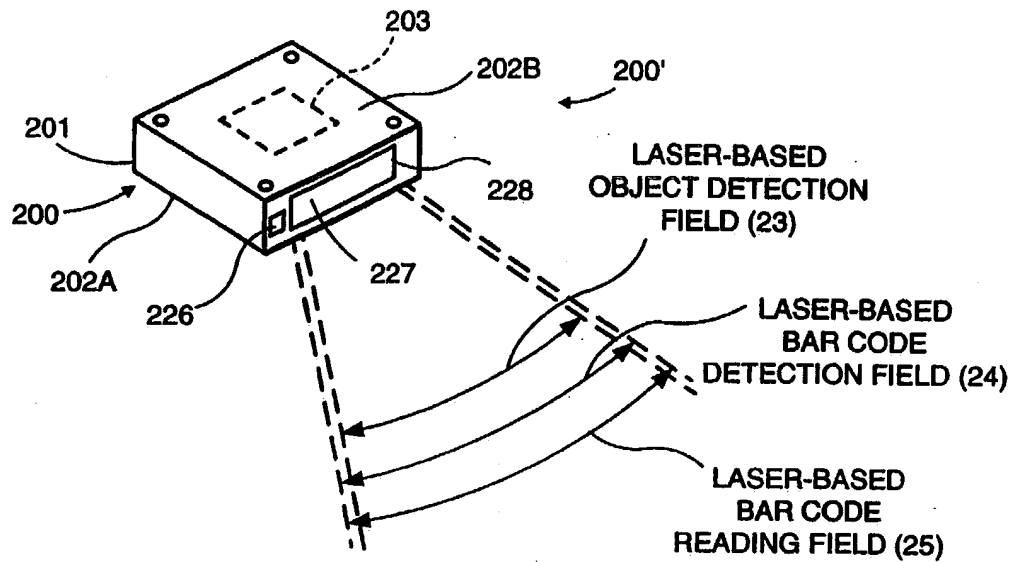


FIG. 9E

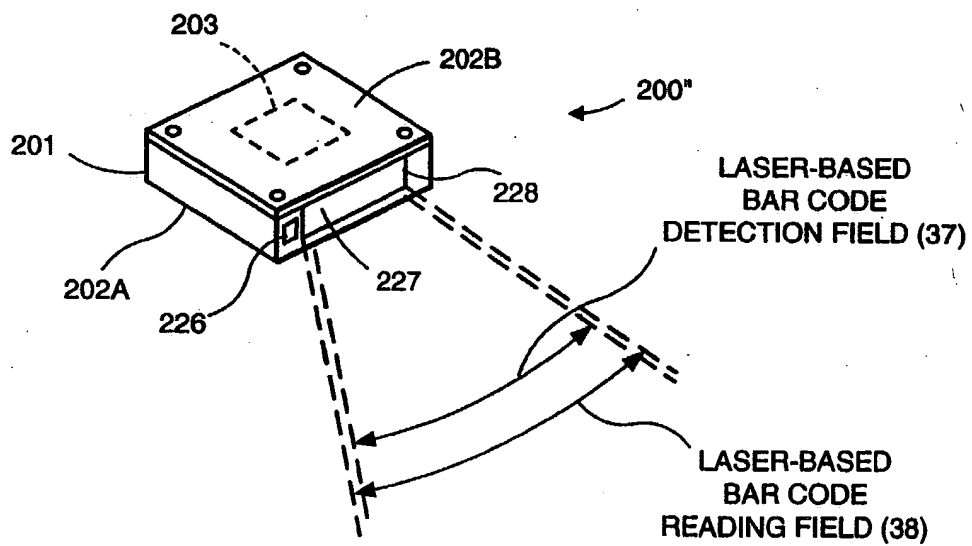


FIG. 9F

FIG. 10A

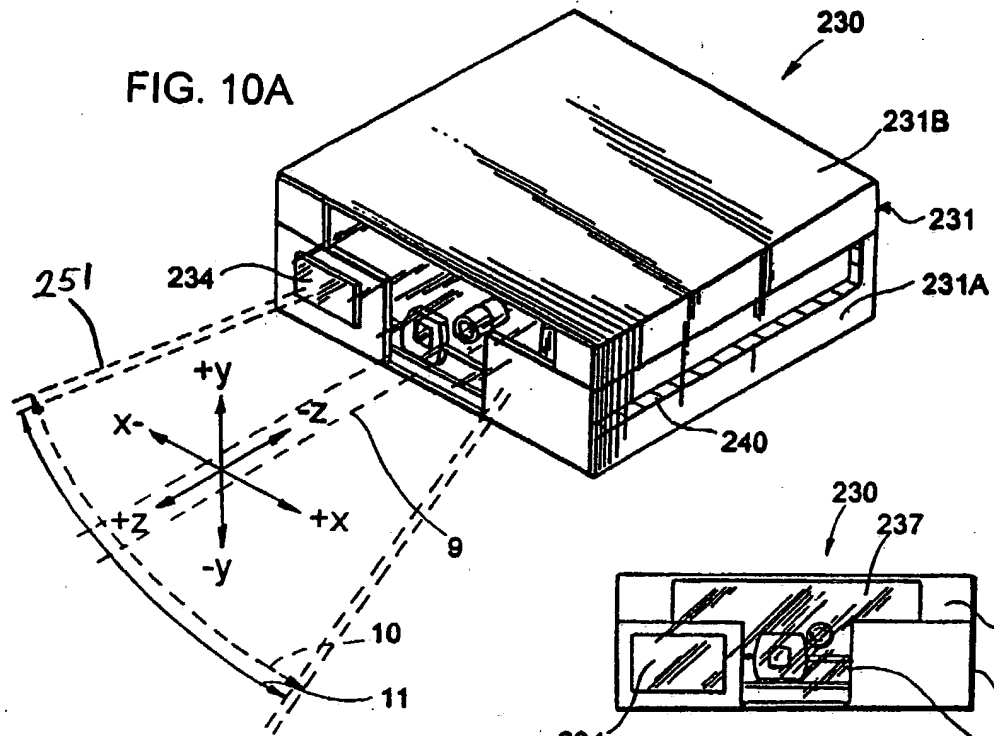


FIG. 10B

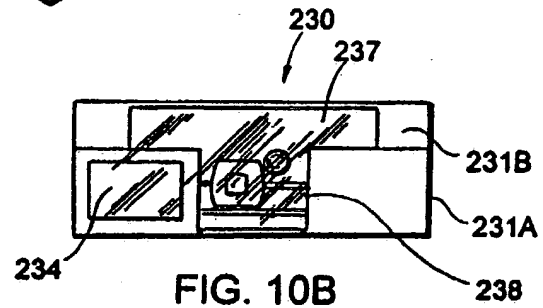


FIG. 10C

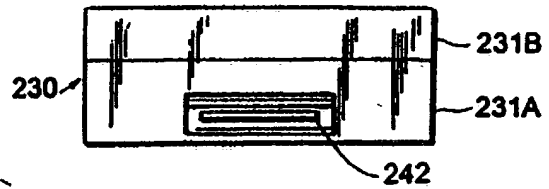
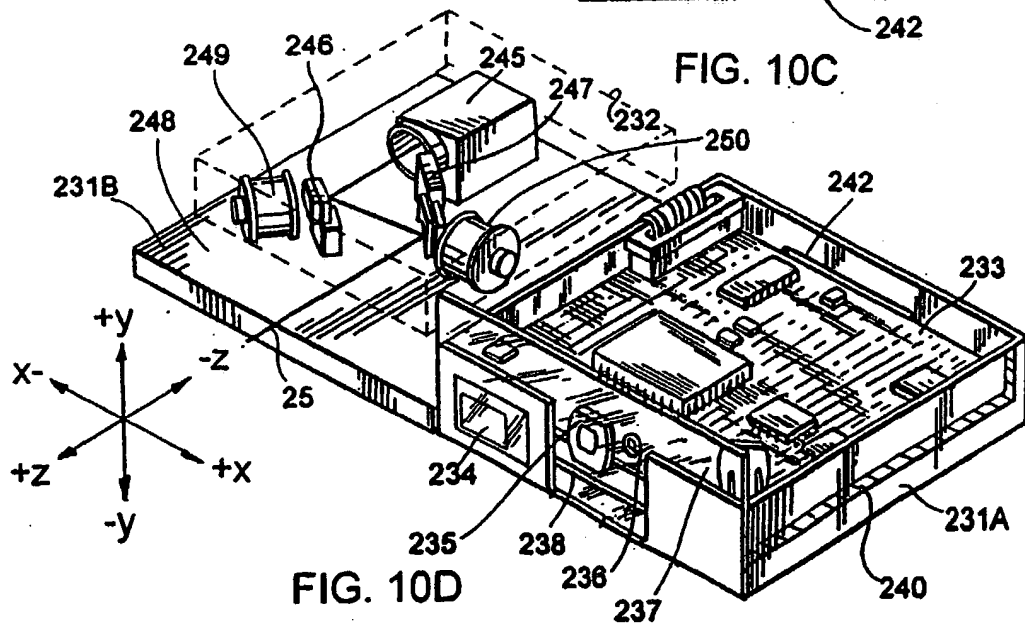


FIG. 10D



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FIG. 10E

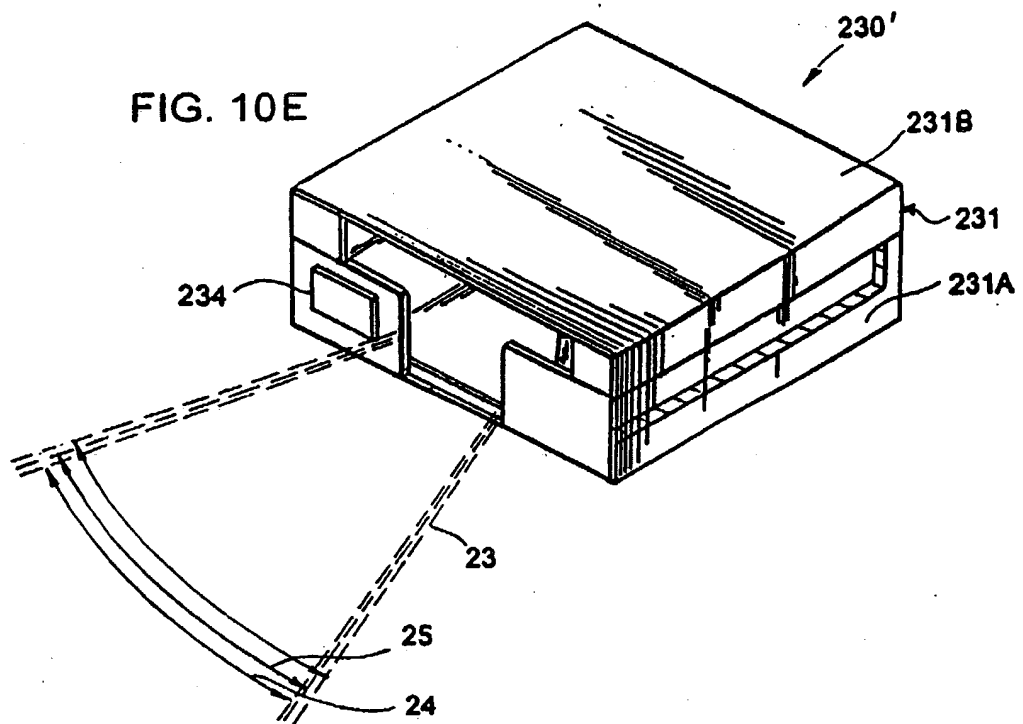
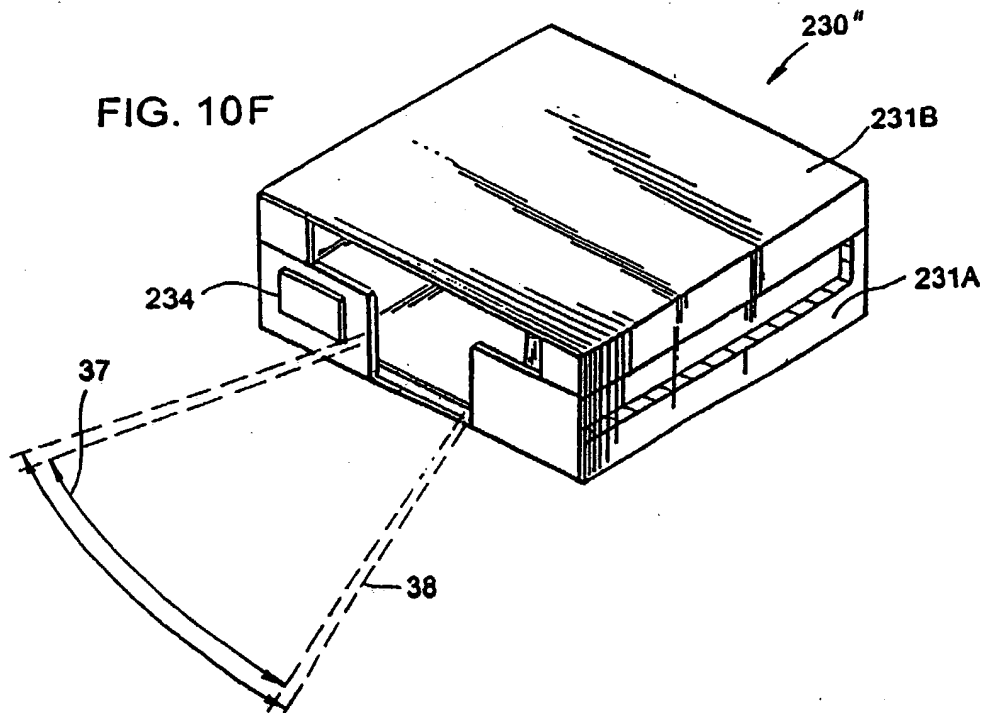


FIG. 10F



[illegible]

FIG. 11C

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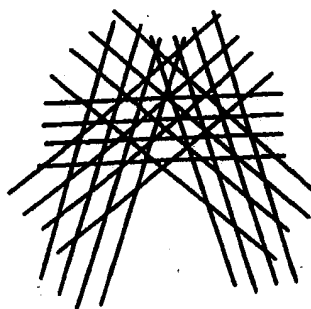


FIG. 12A

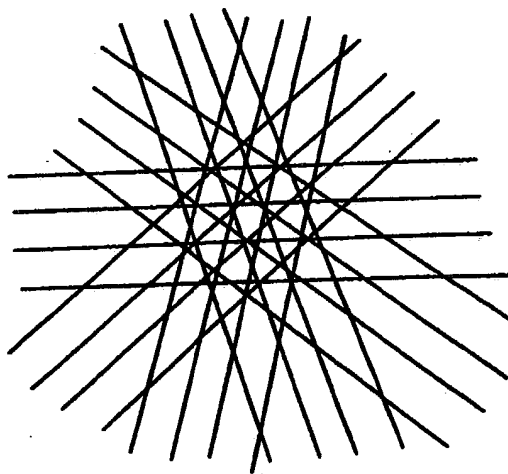
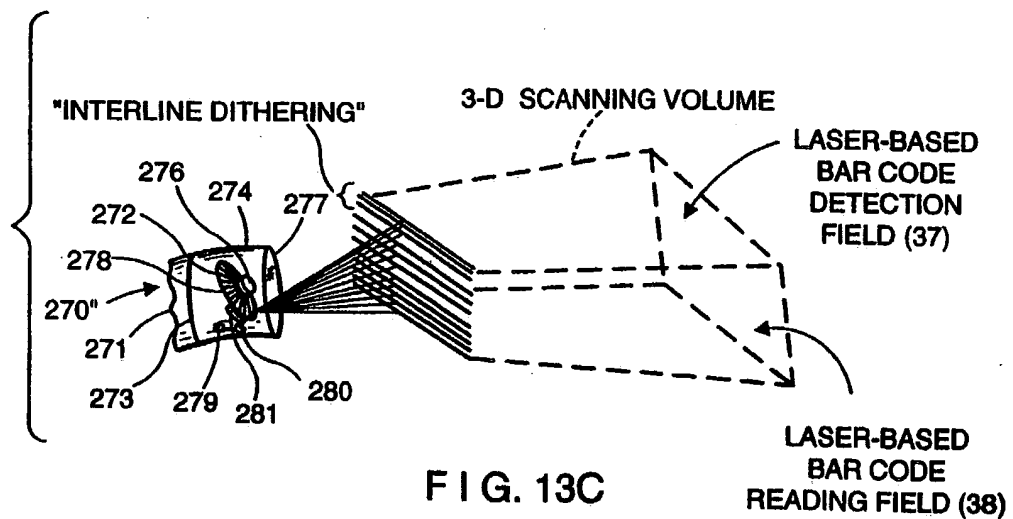
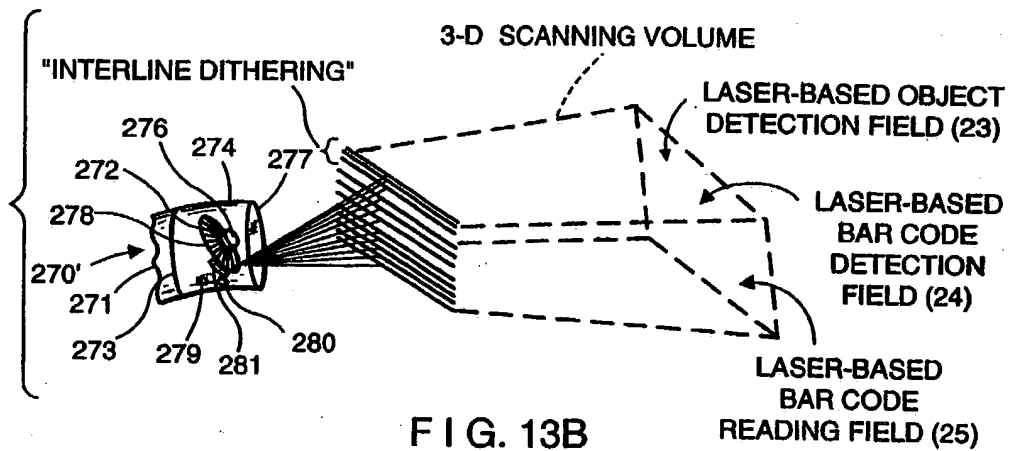
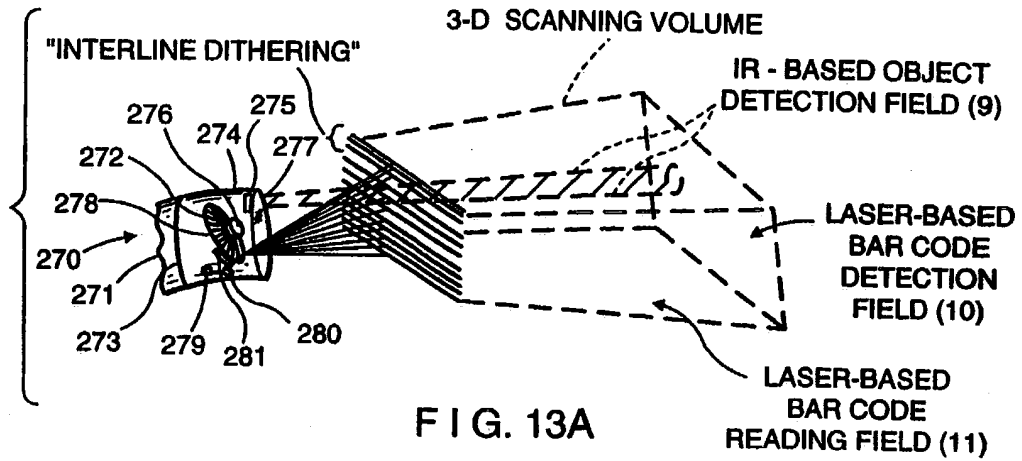
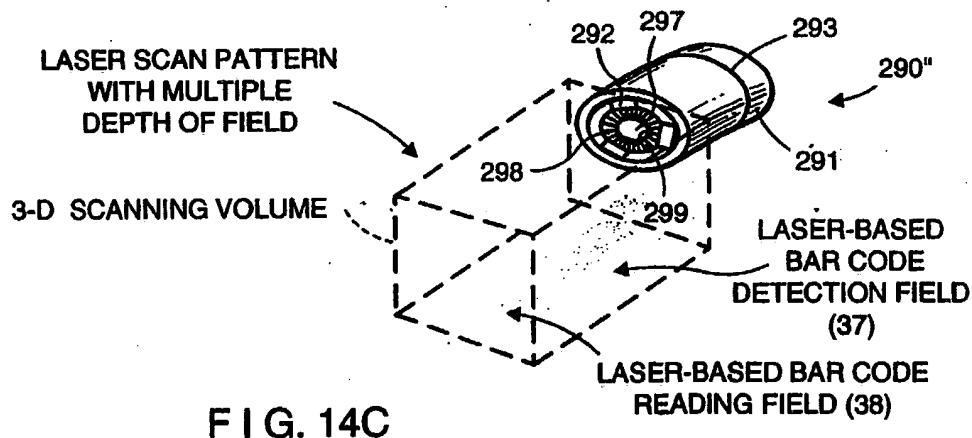
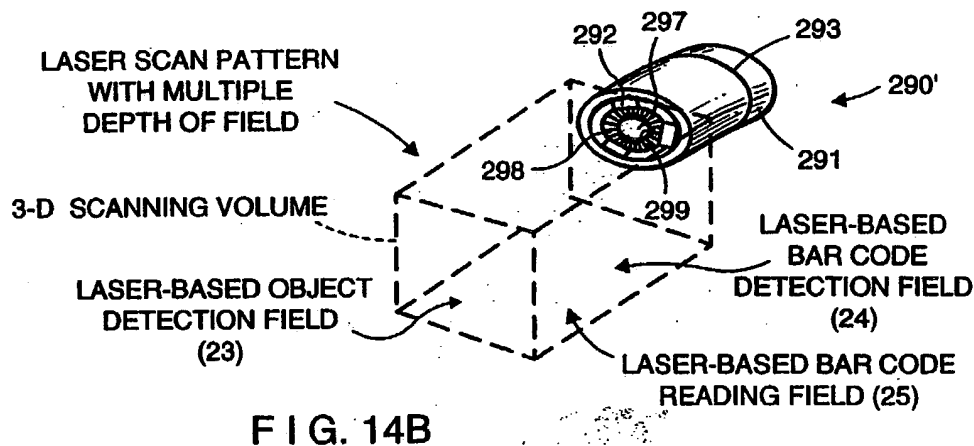
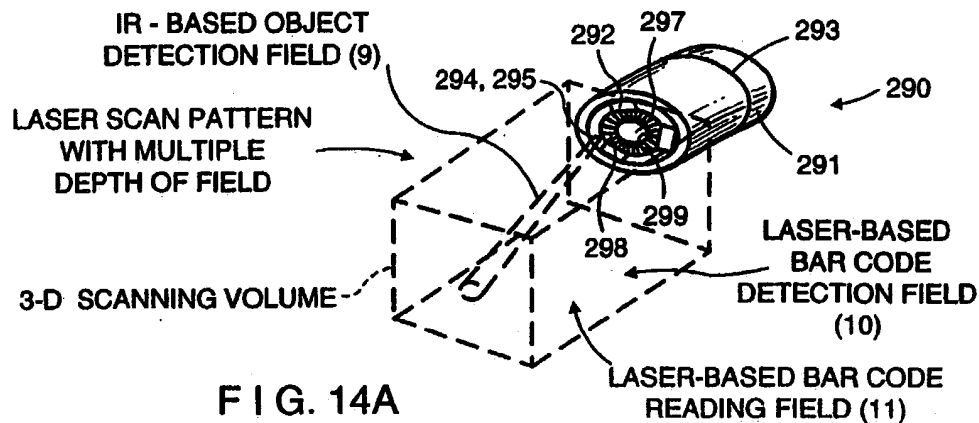


FIG. 12B

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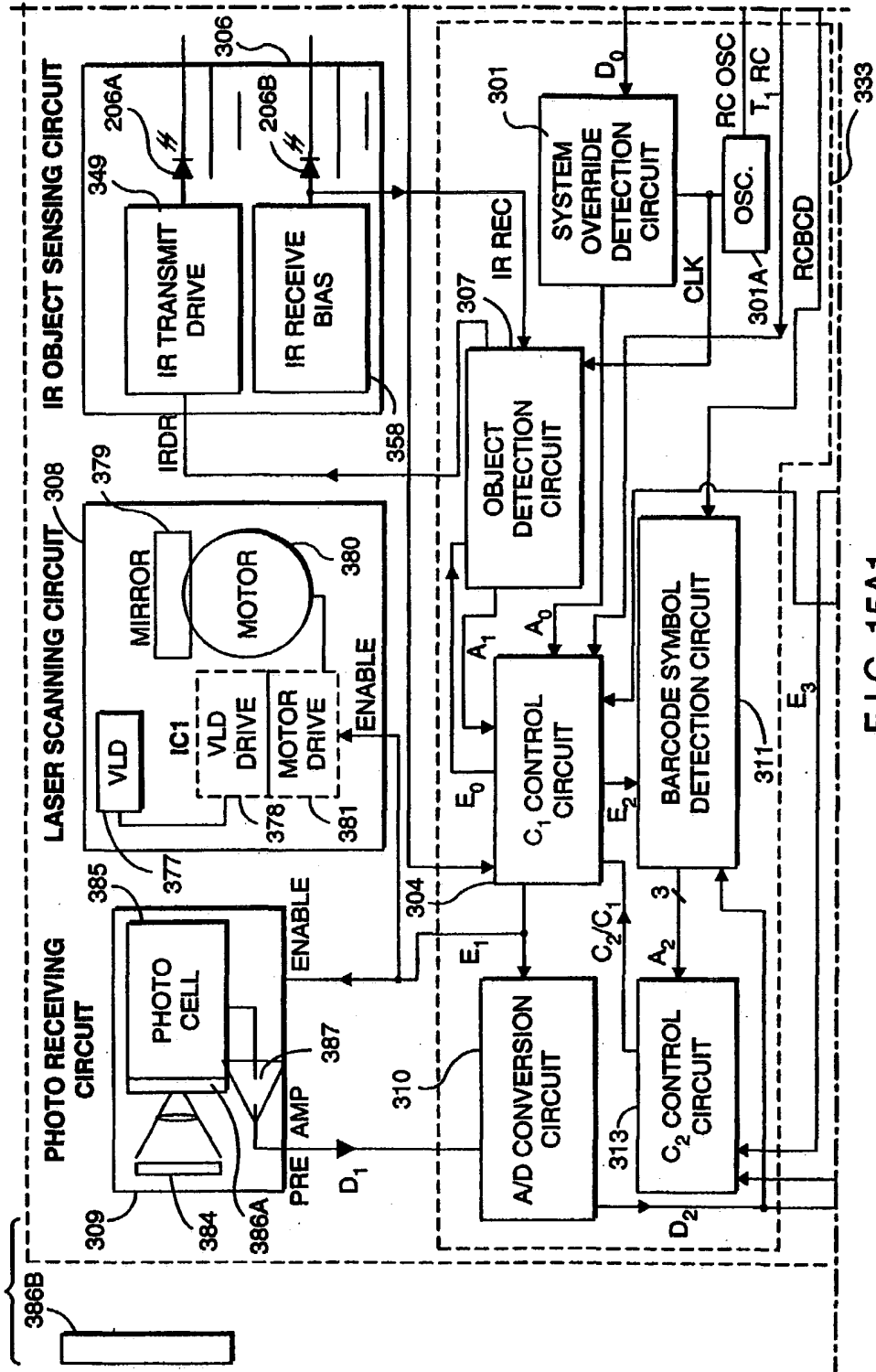


FIG. 15A1

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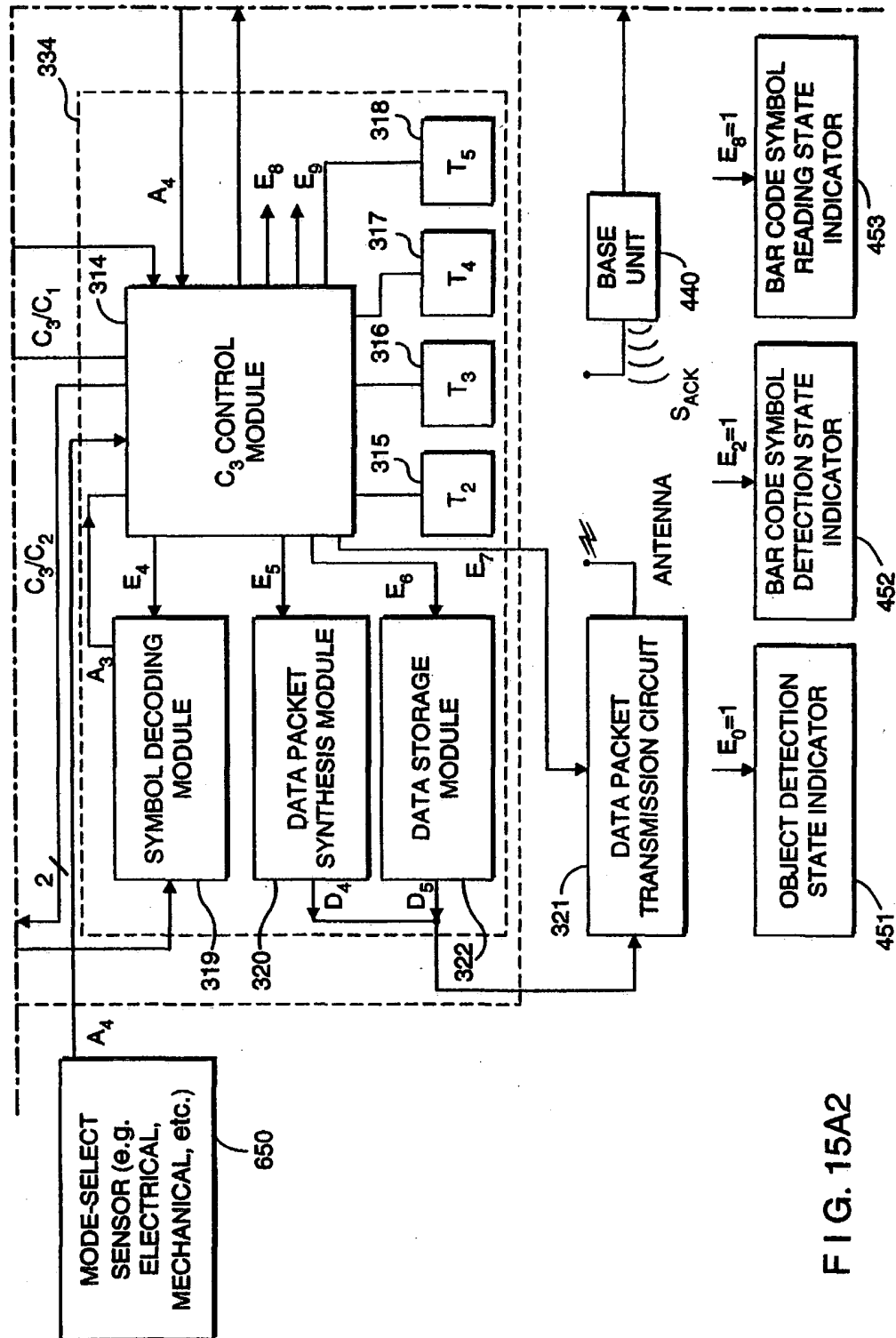


FIG. 15A2

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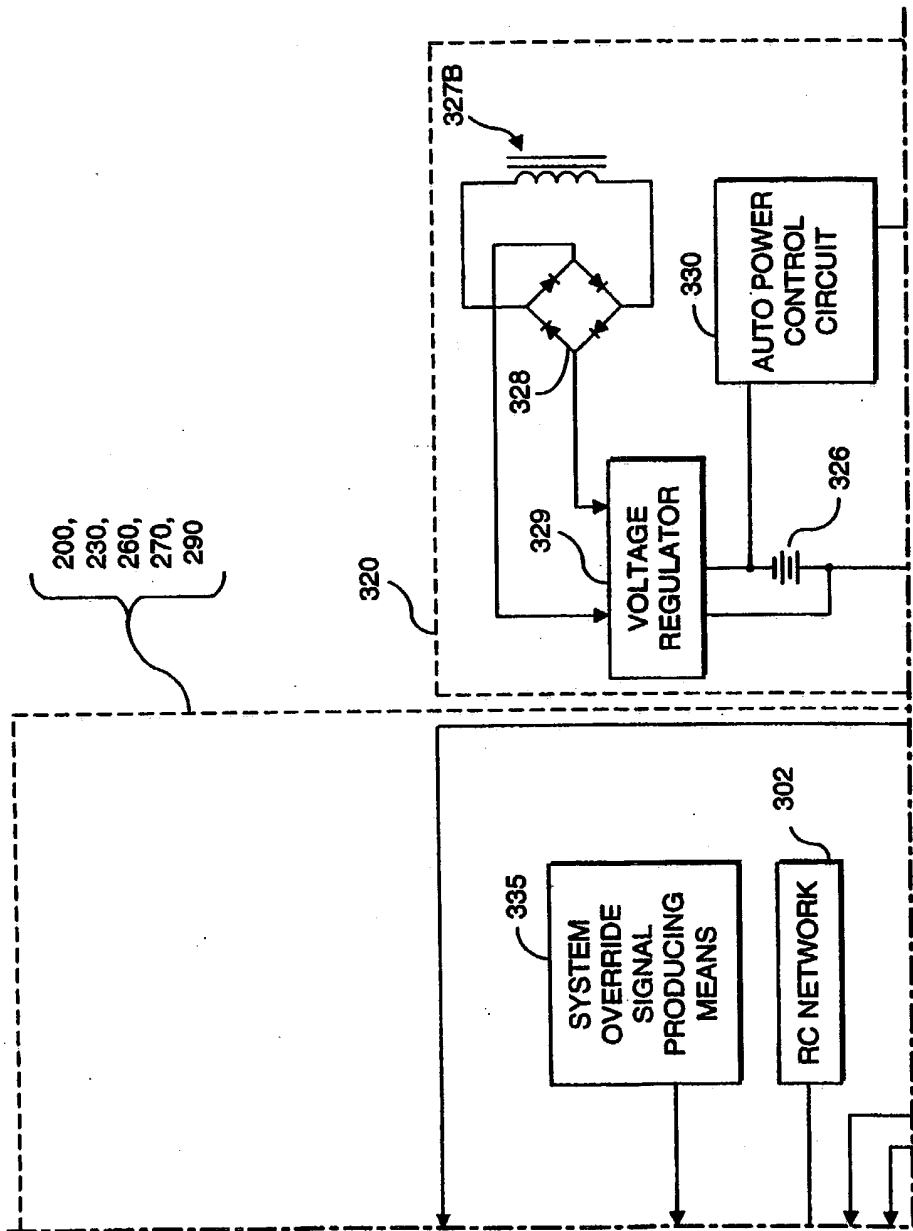
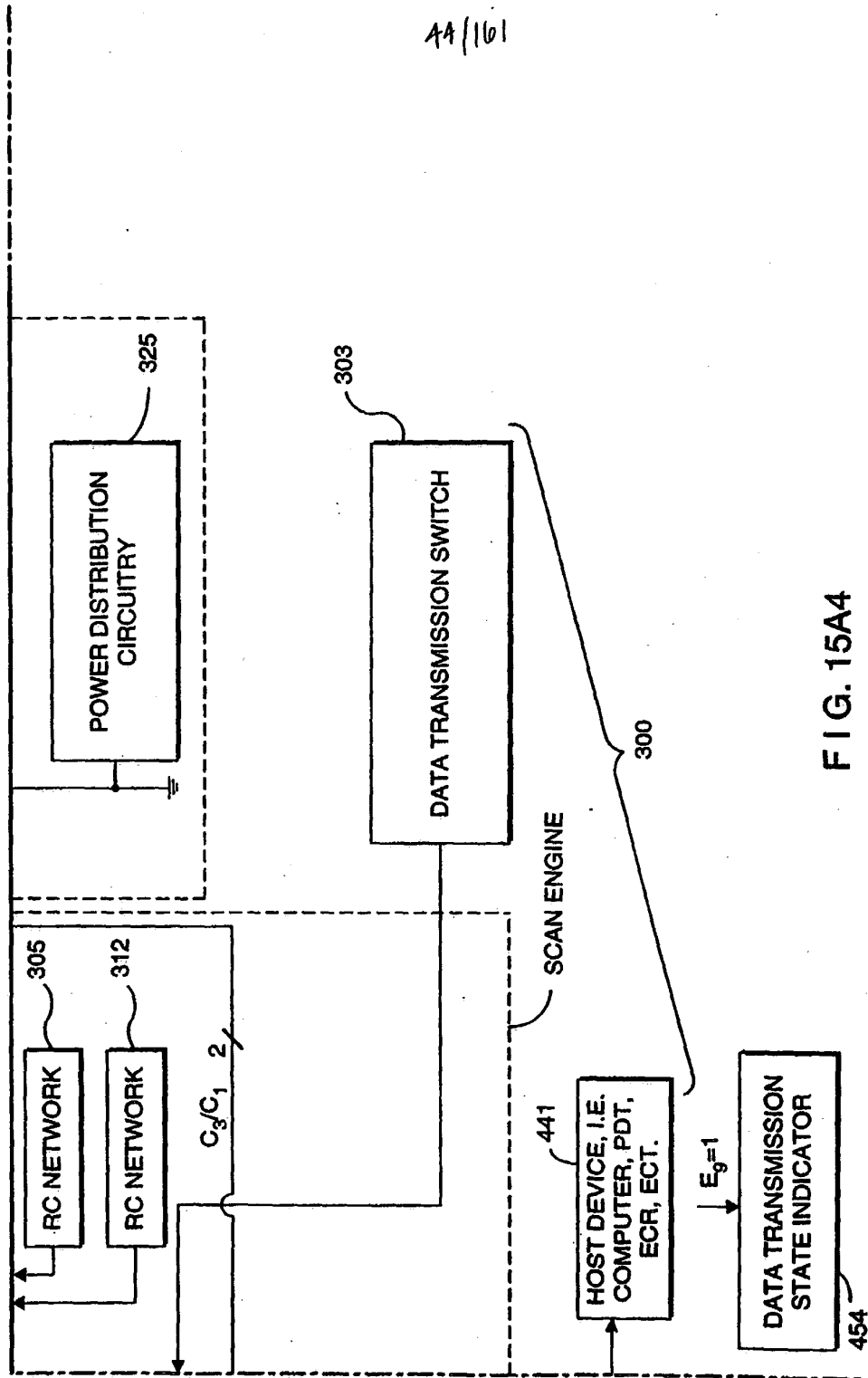


FIG. 15A3

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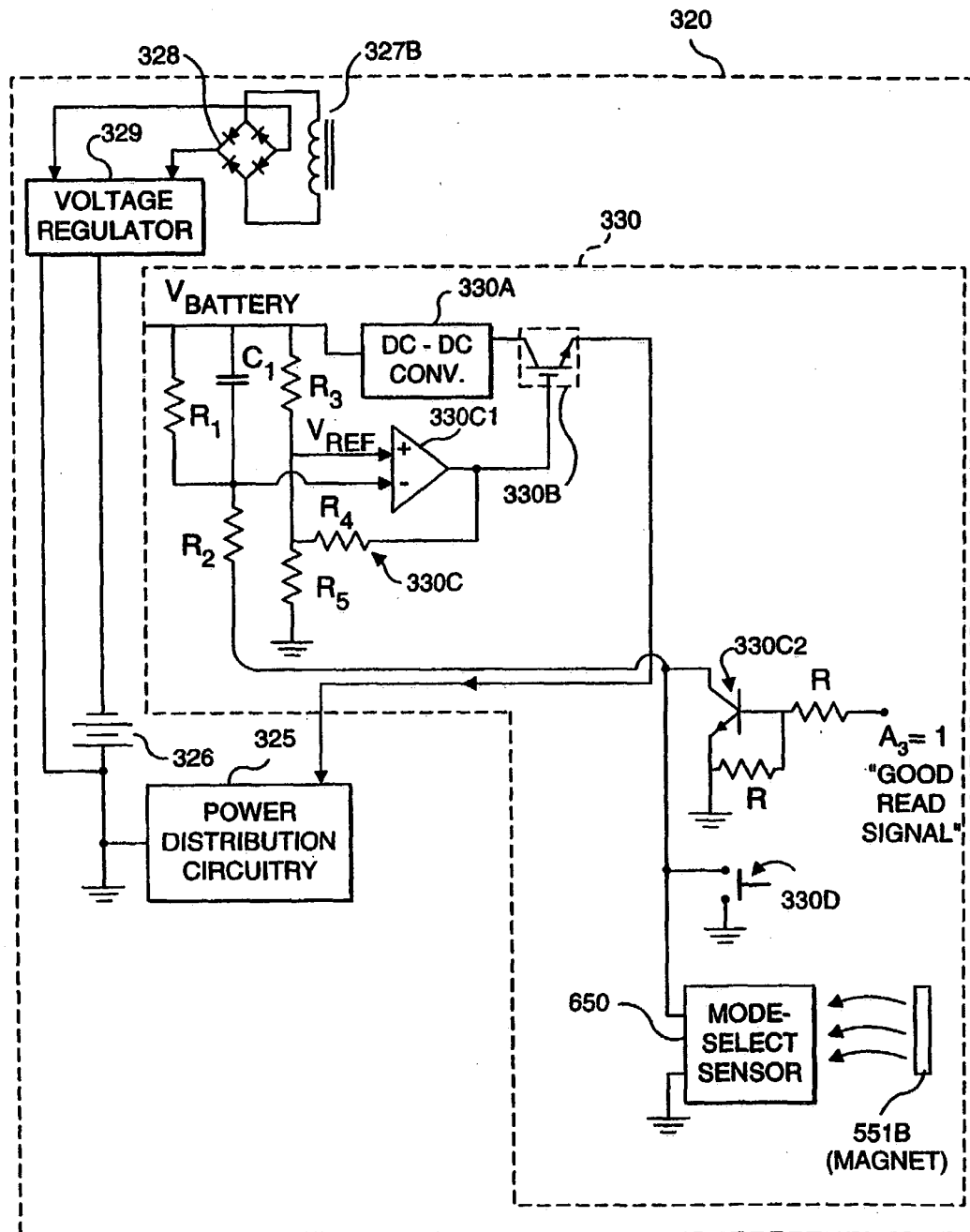


FIG. 15B1

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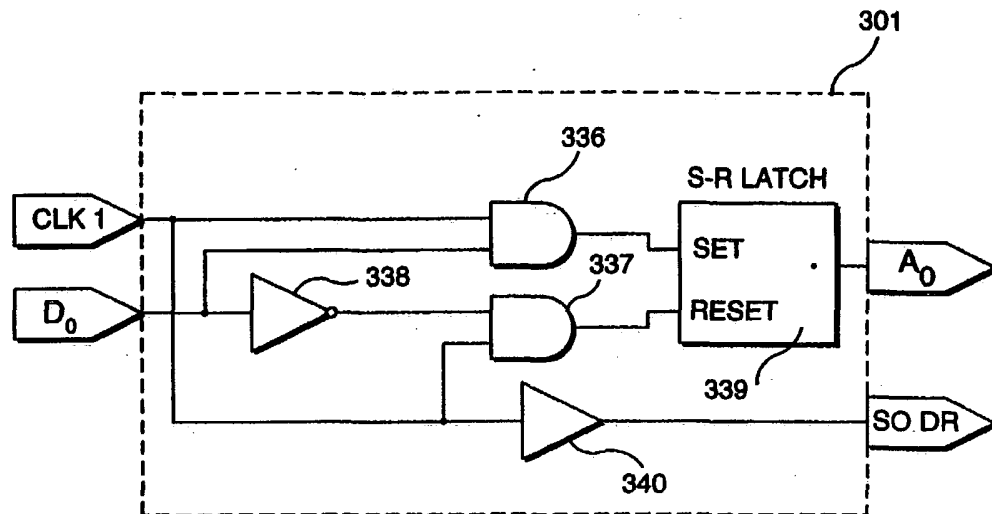


FIG. 15B2

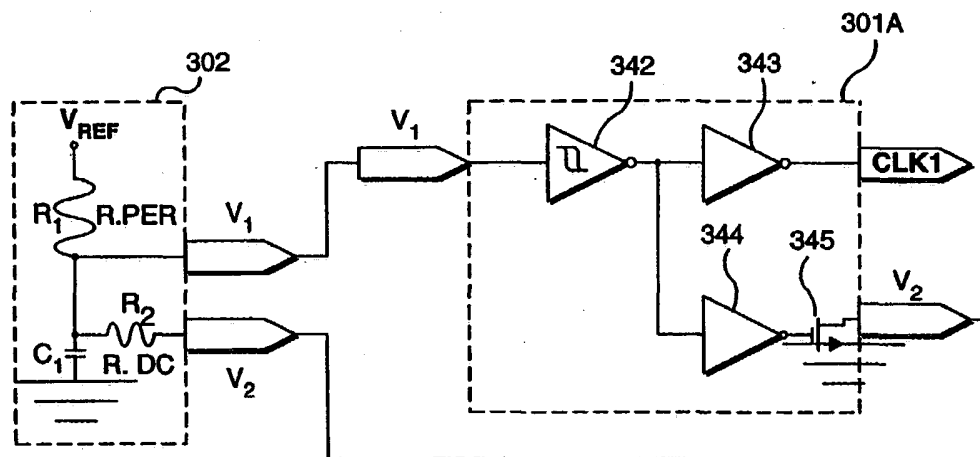


FIG. 15C

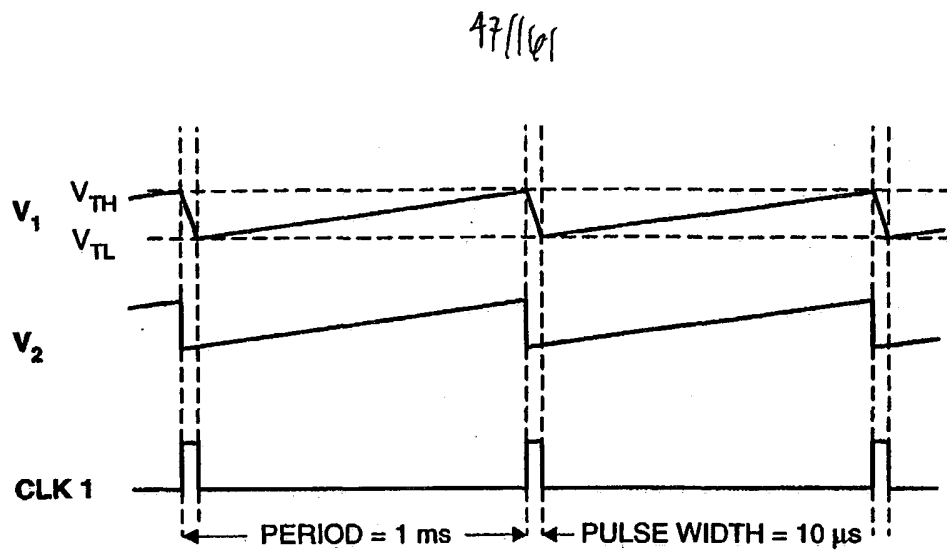


FIG. 15D

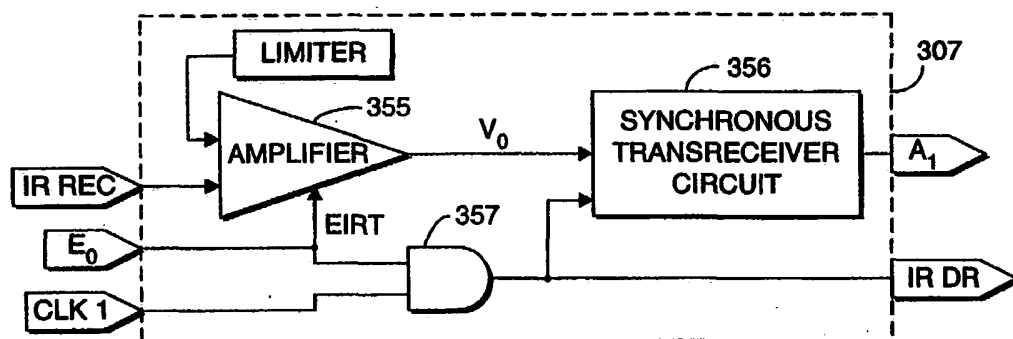


FIG. 15E

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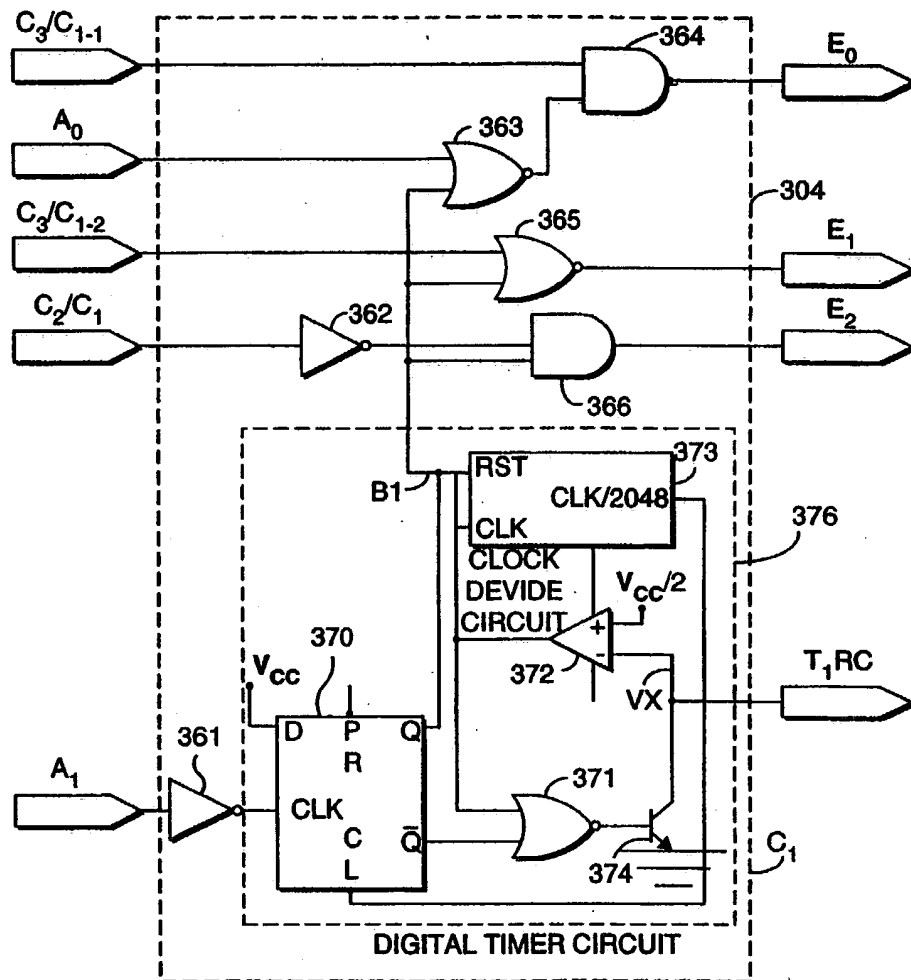


FIG. 15F

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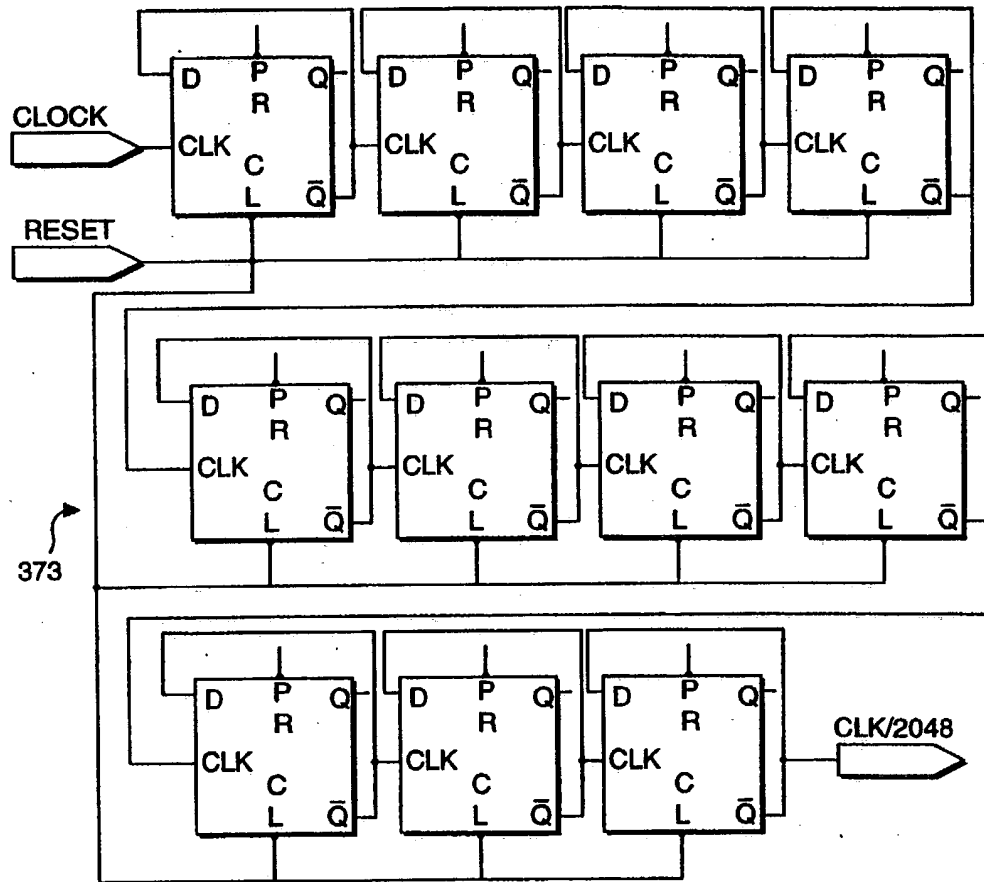


FIG. 15G

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$$\left. \begin{aligned} E_0 &= (B_1 + A_0) (C_3 / C_{1-1}) \\ E_1 &= (C_3 / C_{1-2}) + B_1 \\ E_2 &= (C_2 / C_1) (T_1) \end{aligned} \right\}$$

FIG. 15H

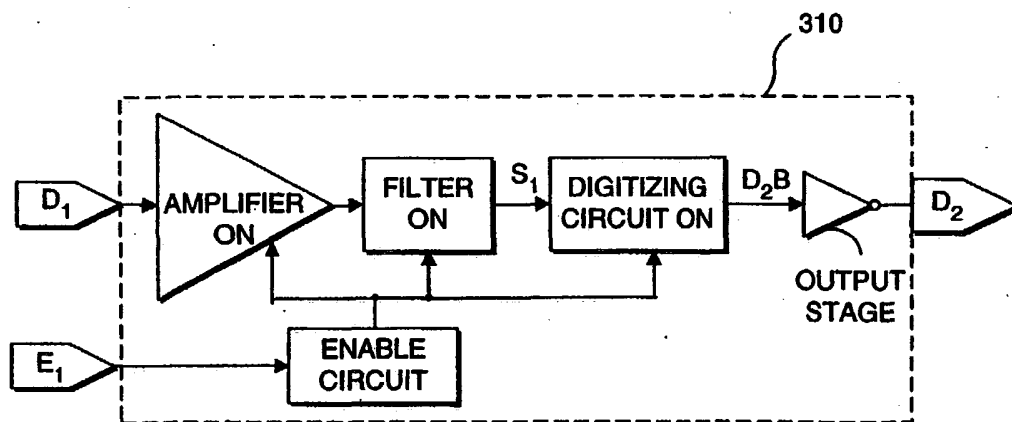


FIG. 15I

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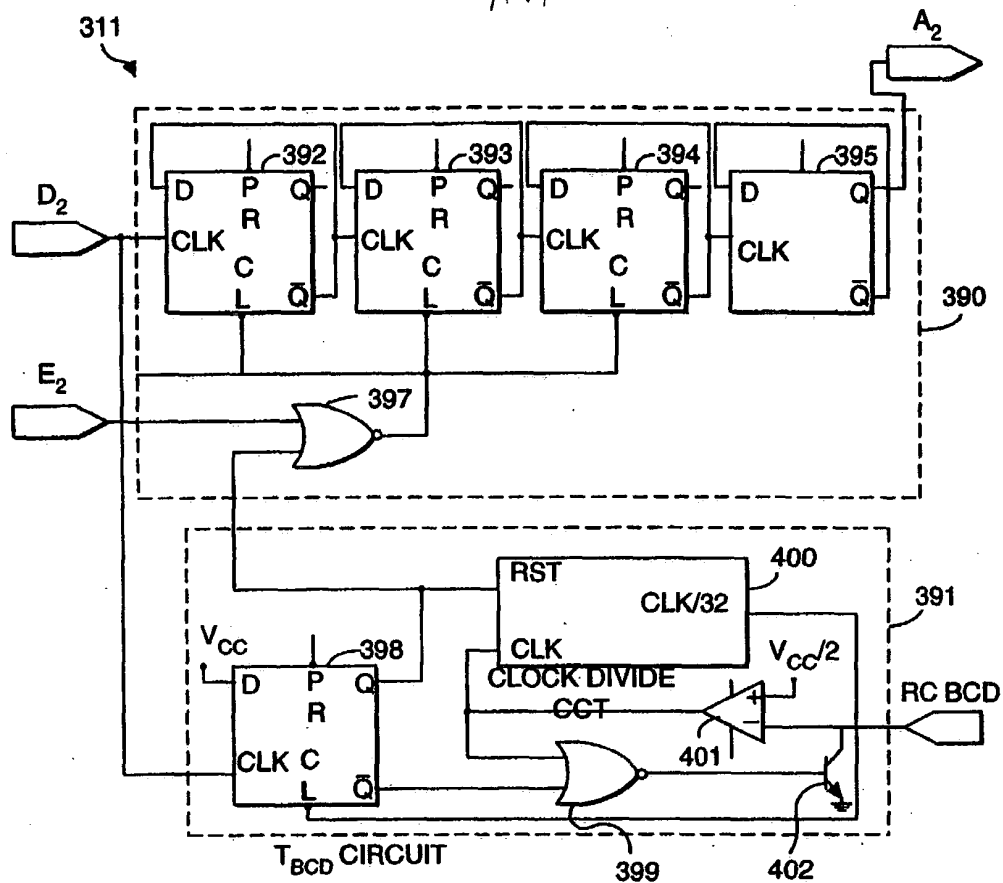


FIG. 15J

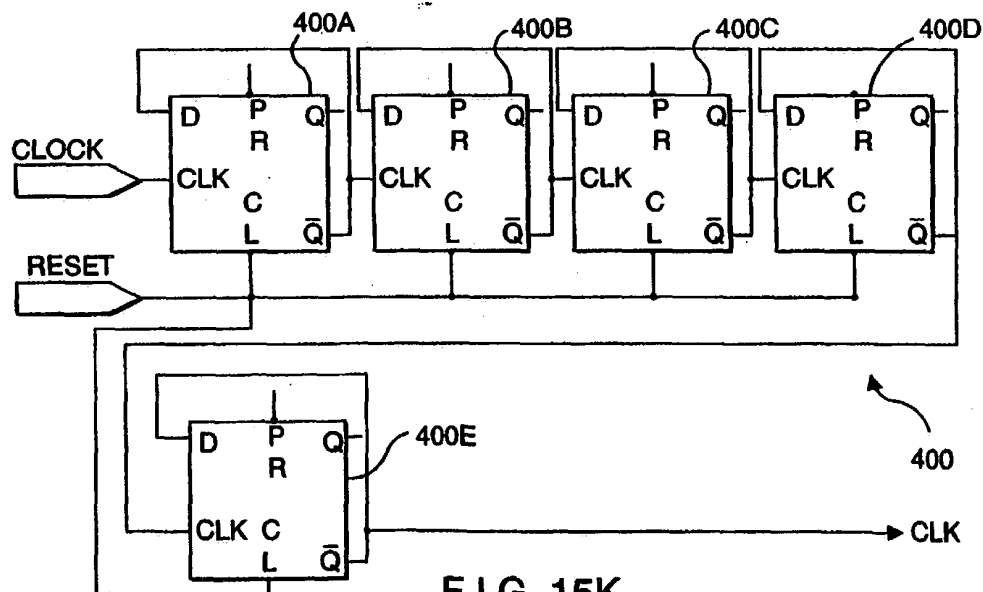


FIG. 15K

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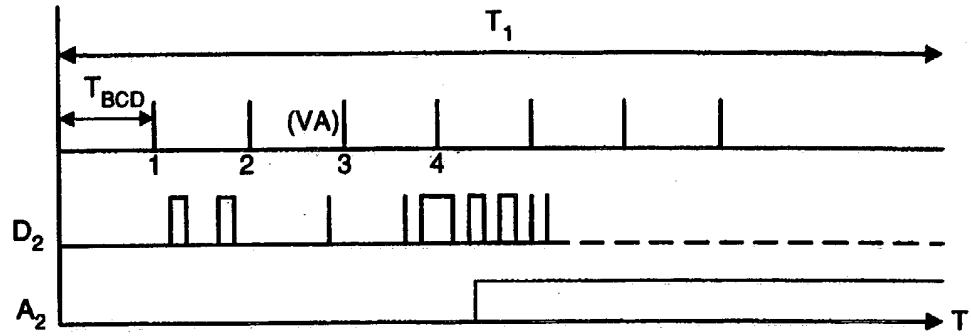


FIG. 15L

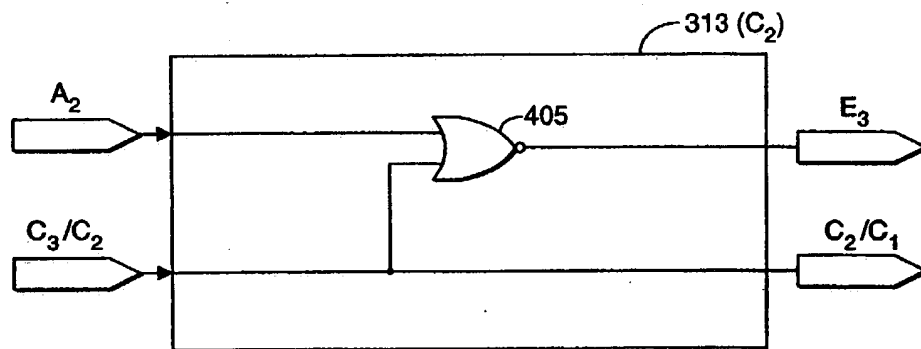


FIG. 15M

C_3/C_2	A_2	E_3	C_2/C_1
0	0	0	0
0	1	1	0
1	X	1	1

X: DON'T CARE (I.E. C_3/C_2 OVERRIDES A_2)

FIG. 15N

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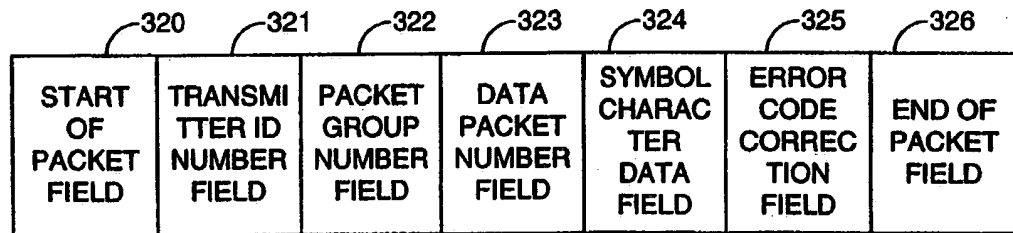


FIG. 150

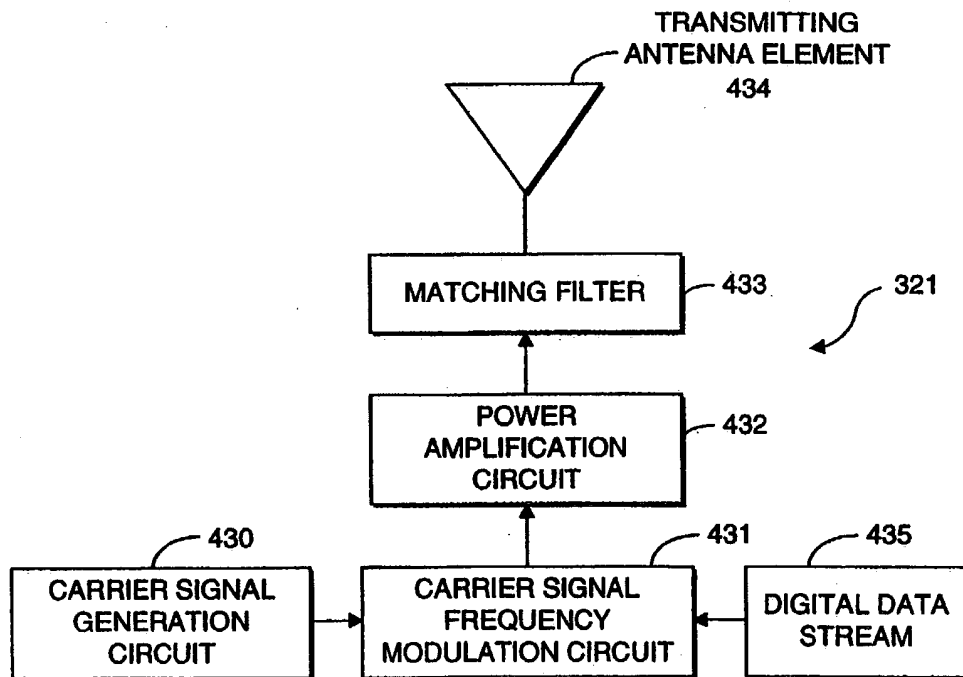


FIG. 16

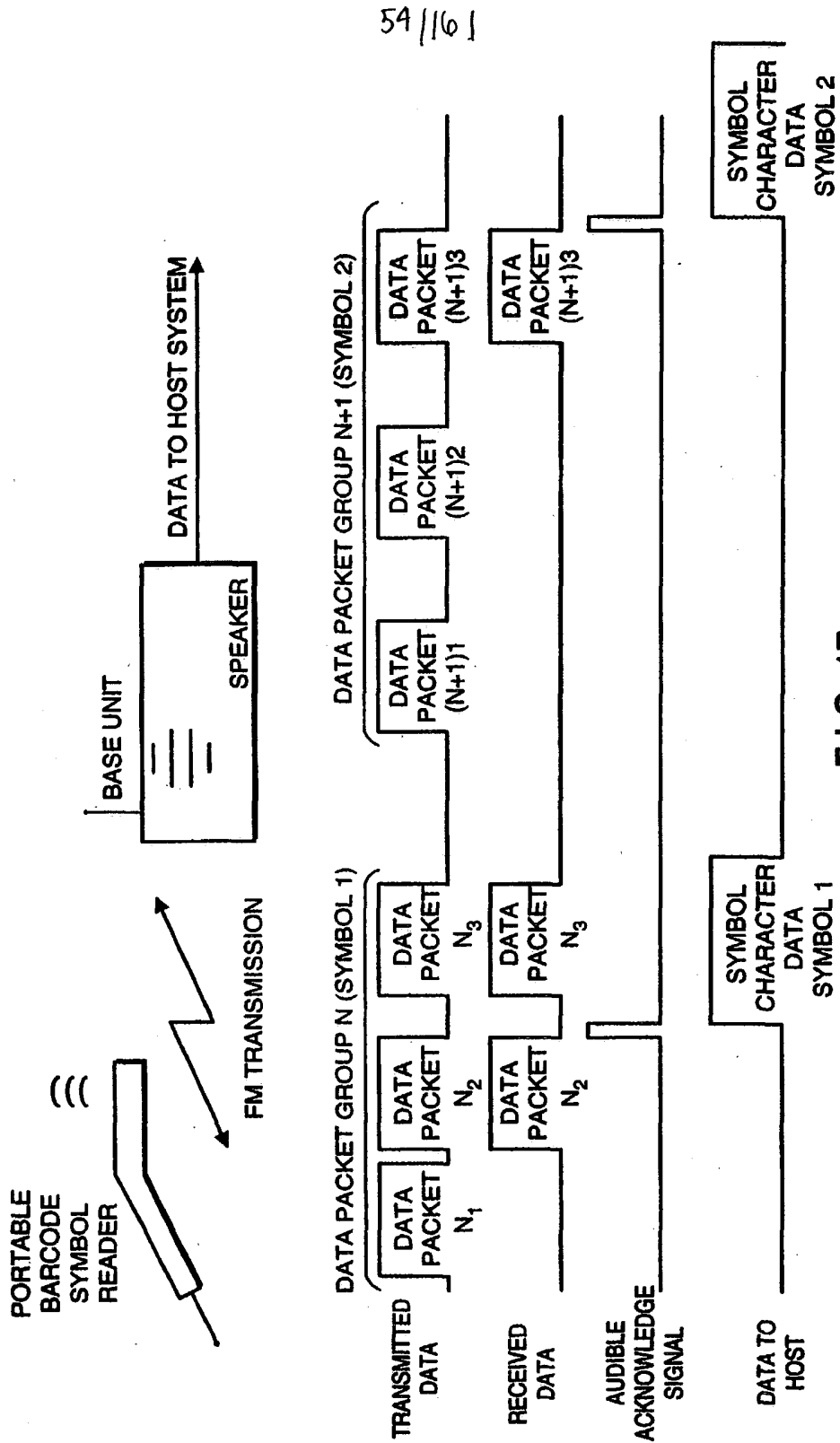


FIG. 17

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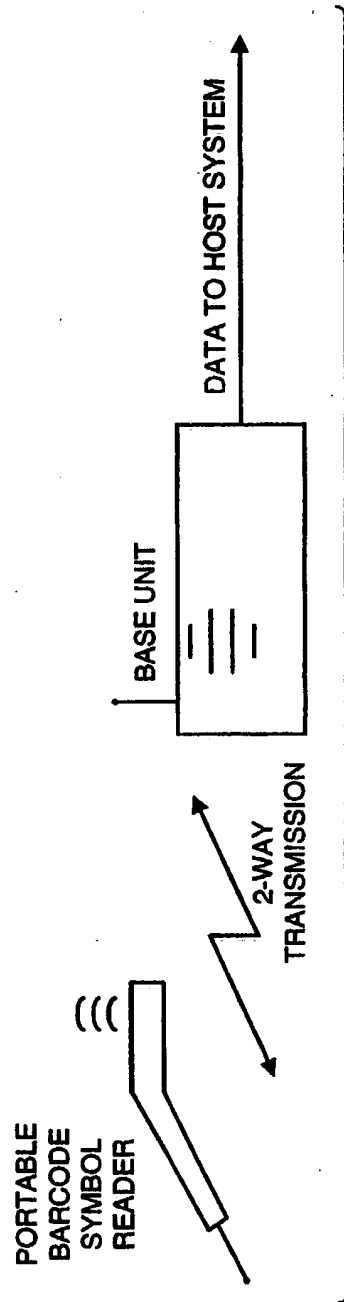


FIG. 18



FIG. 19

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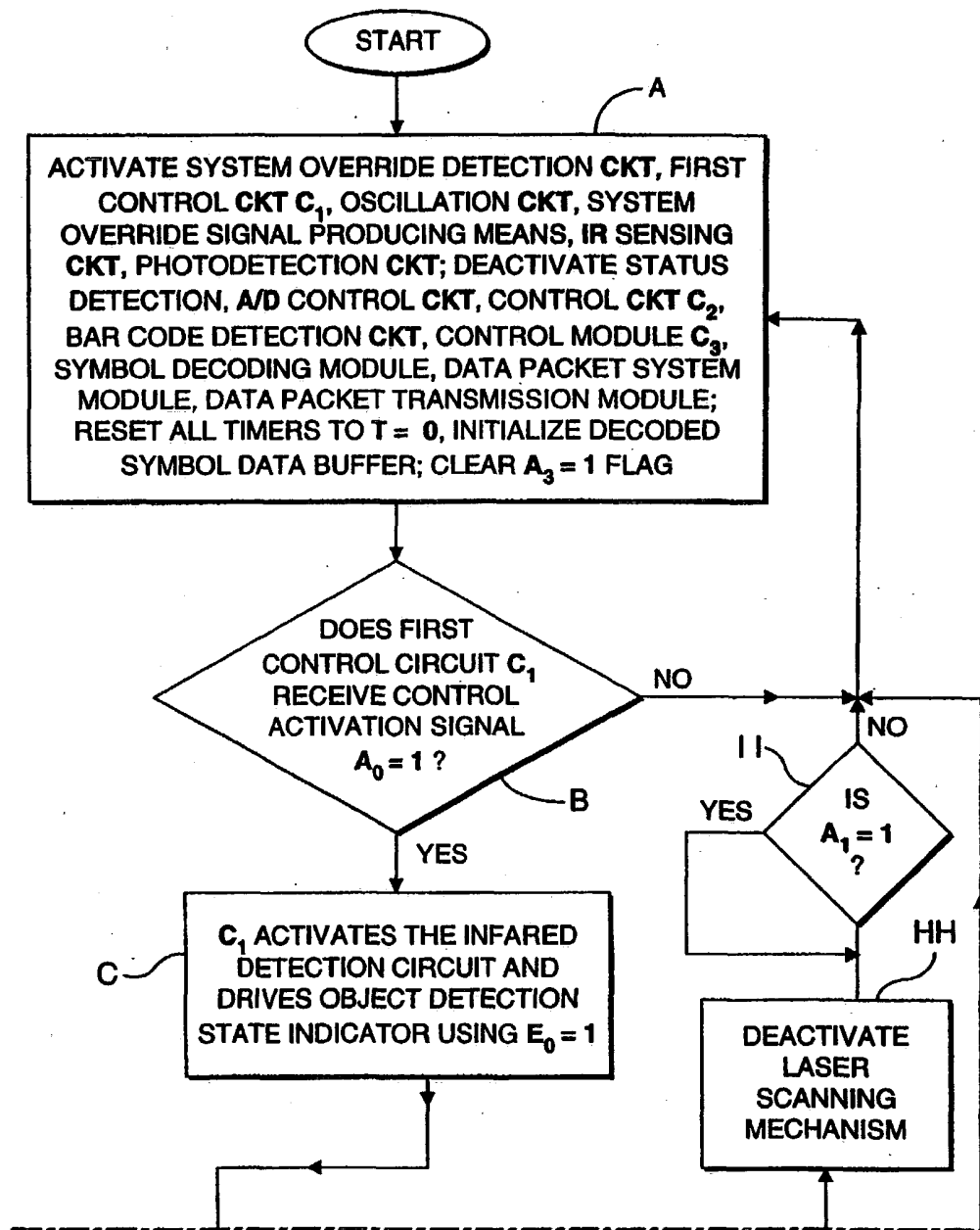


FIG. 20A1

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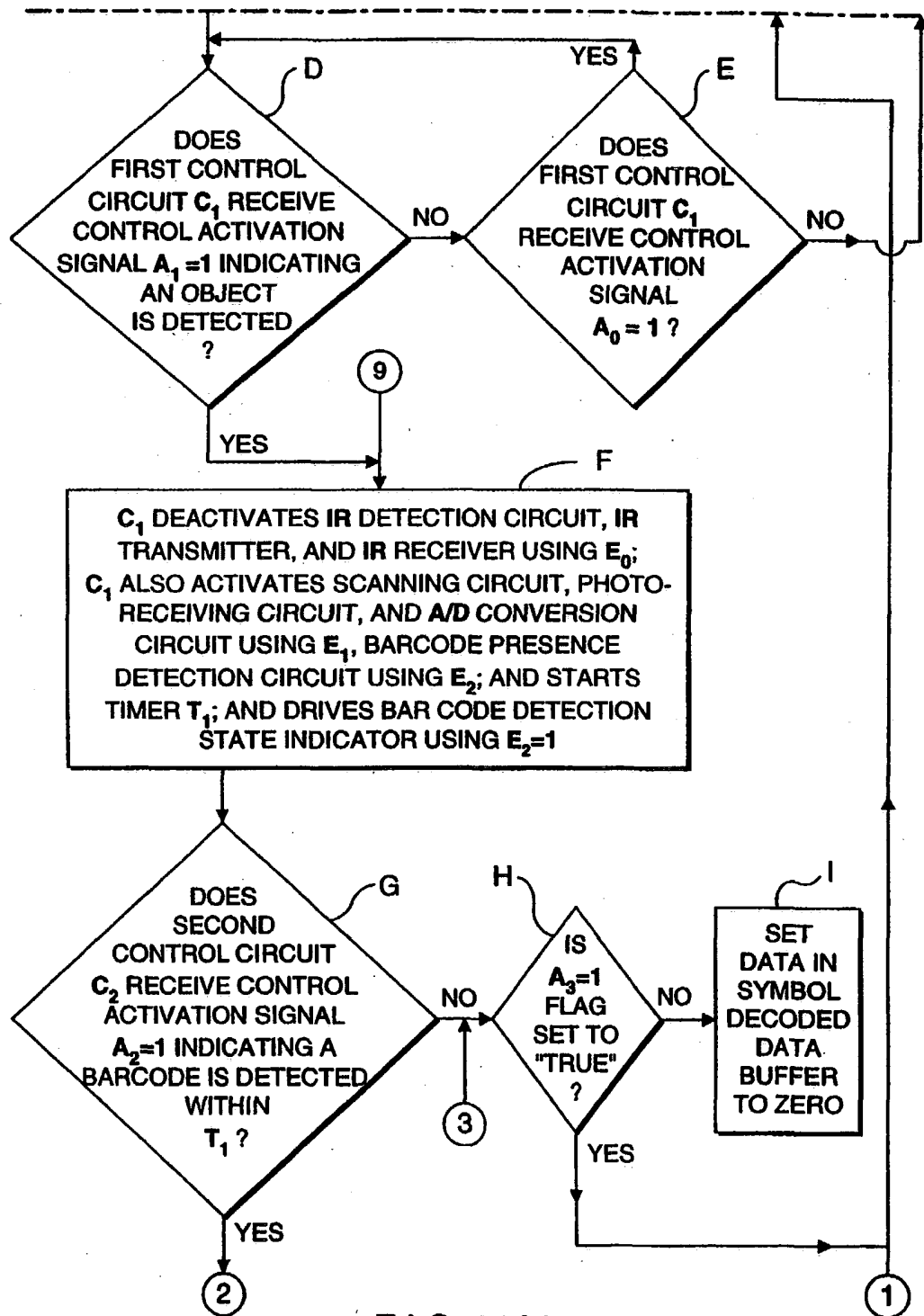
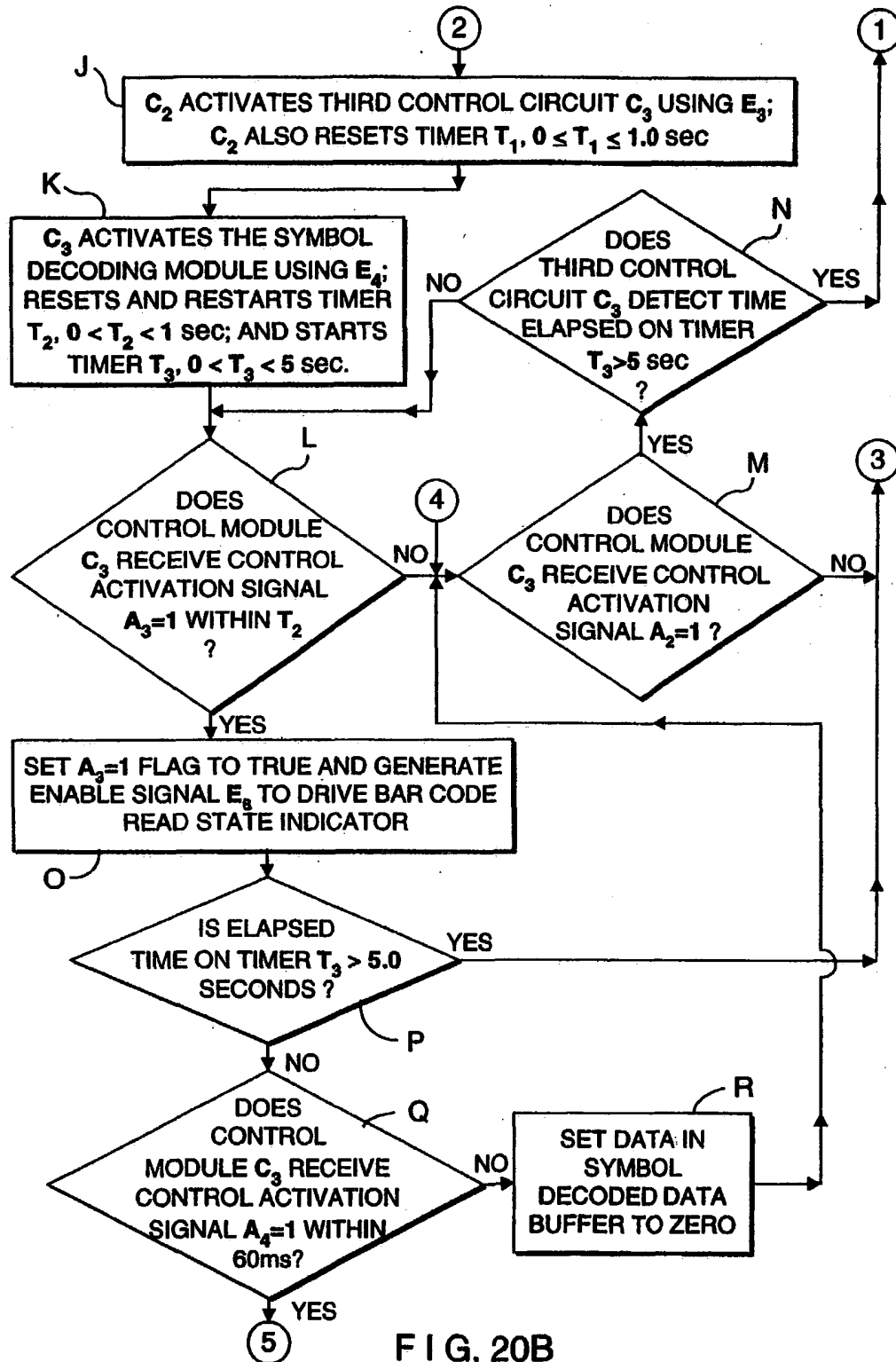


FIG. 20A2

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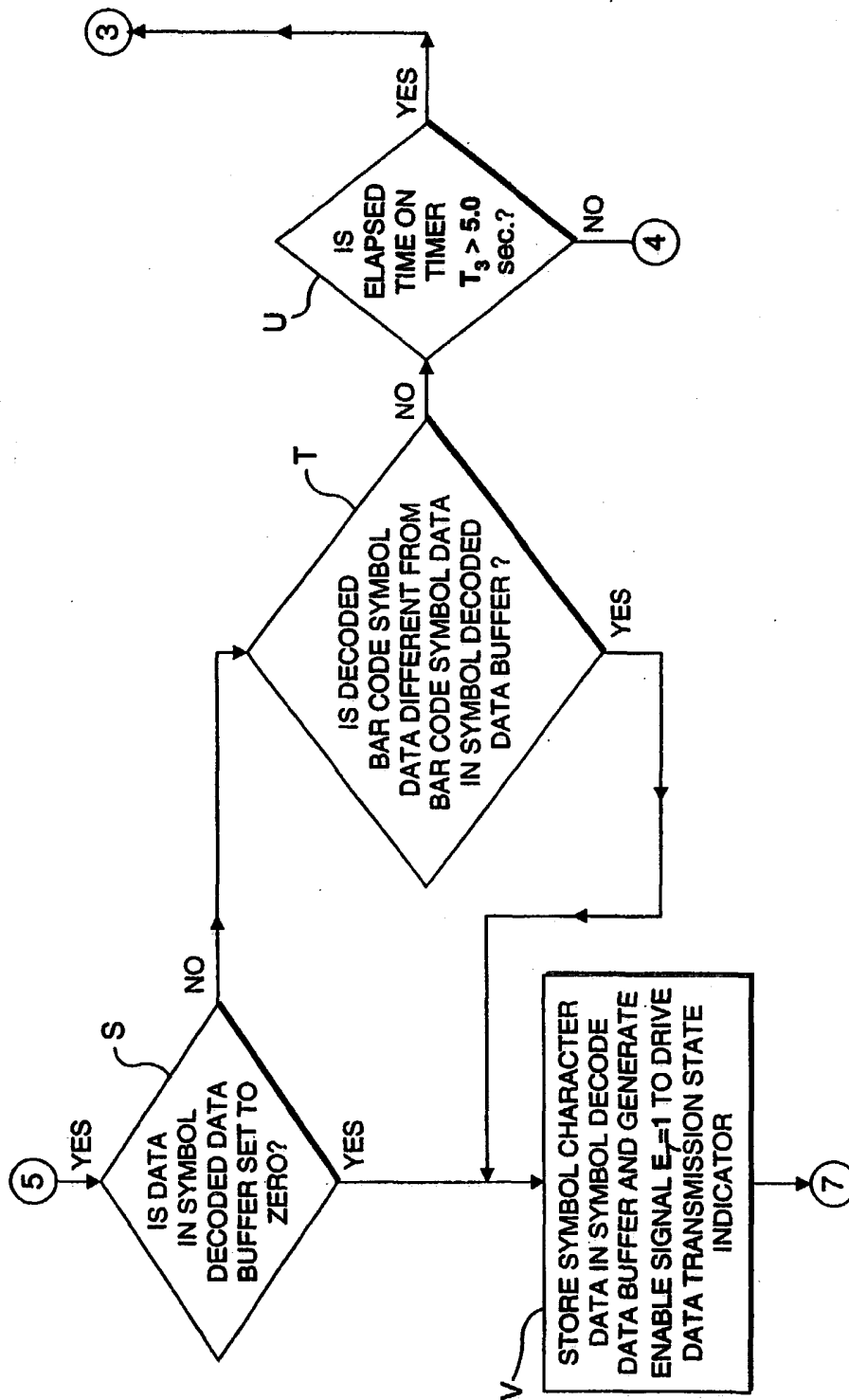


FIG. 20C

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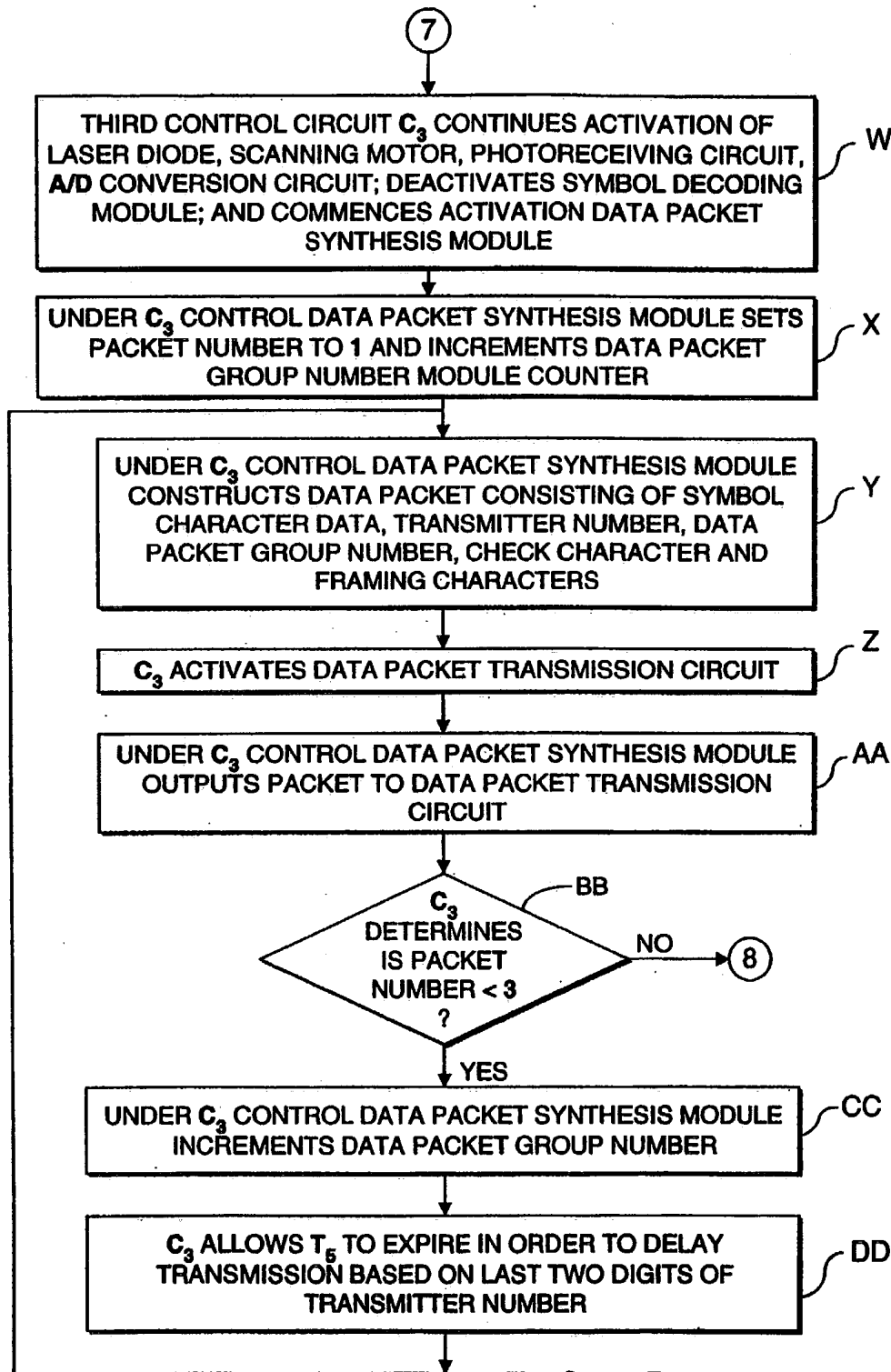


FIG. 20D

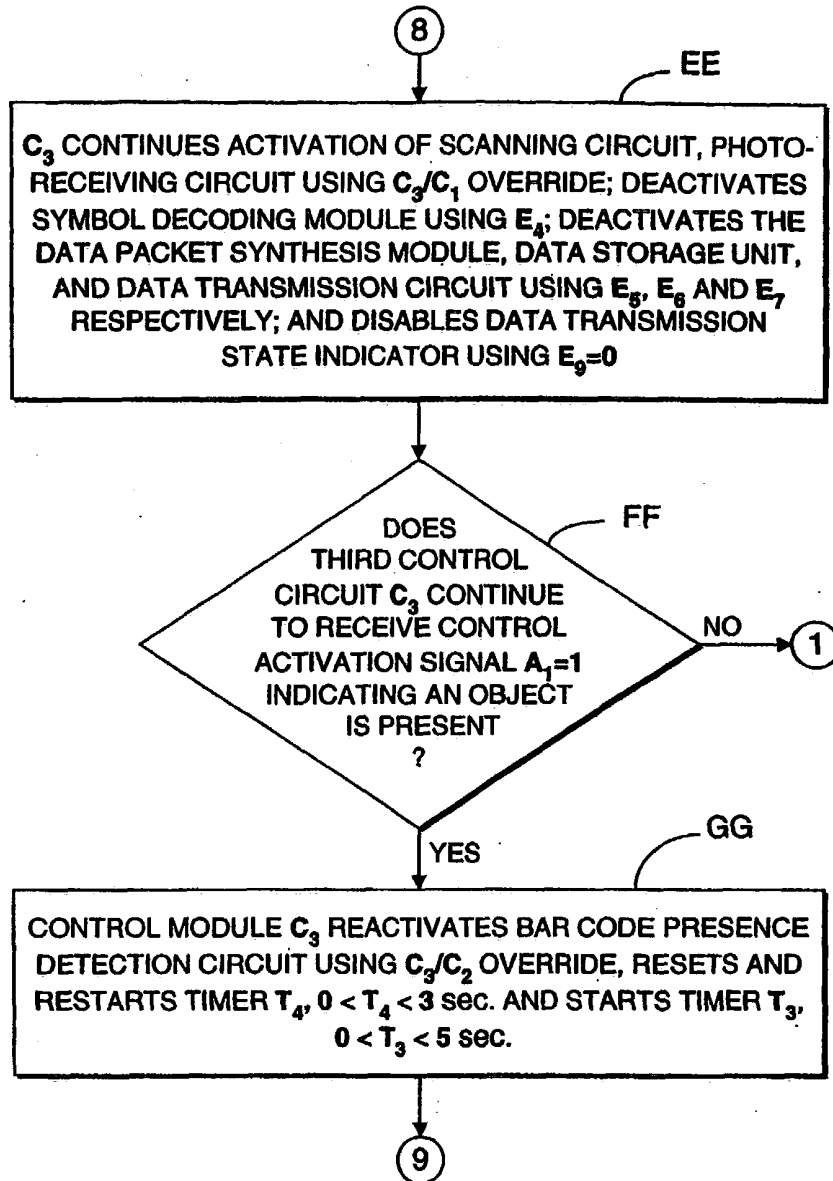


FIG. 20E

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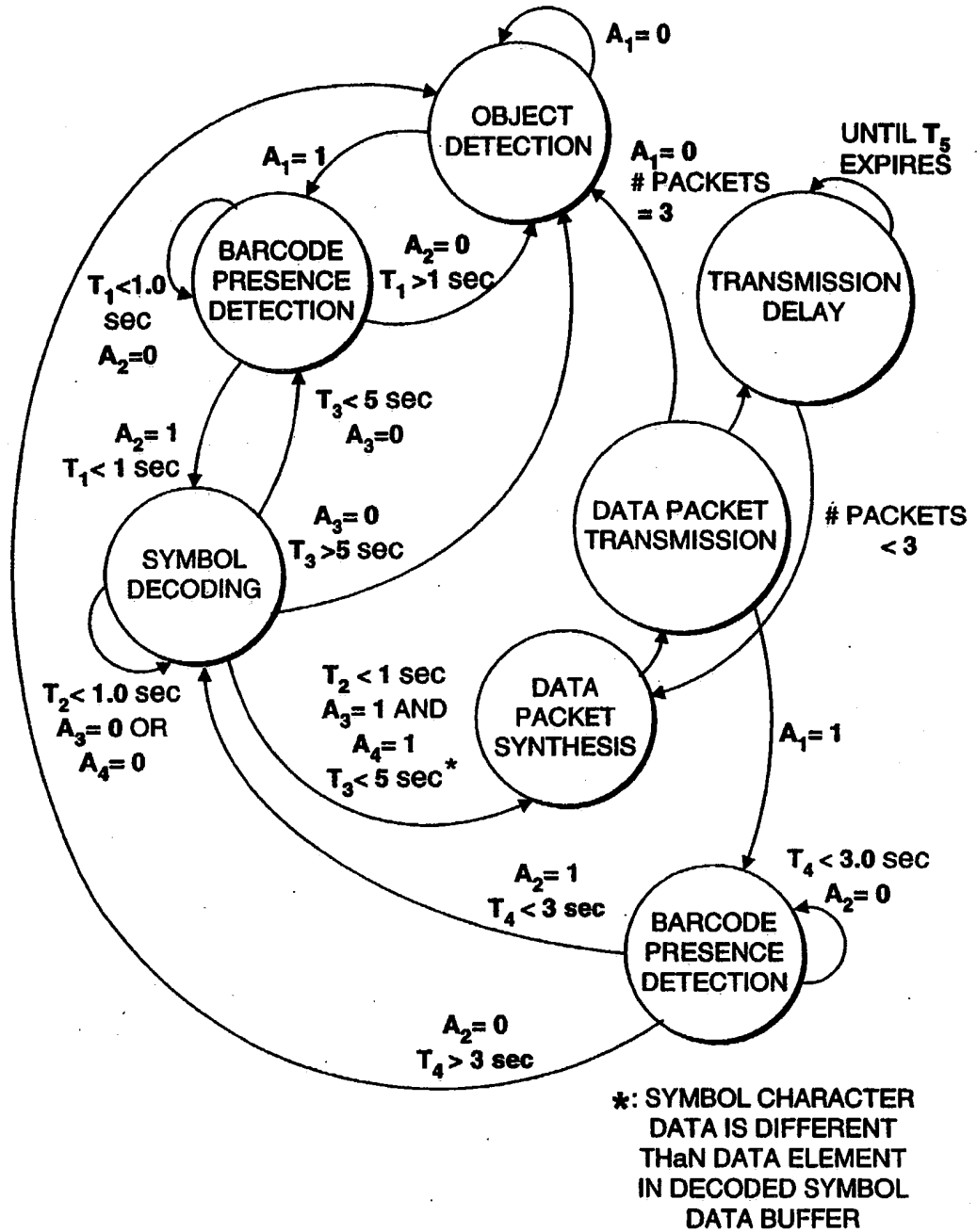


FIG. 21

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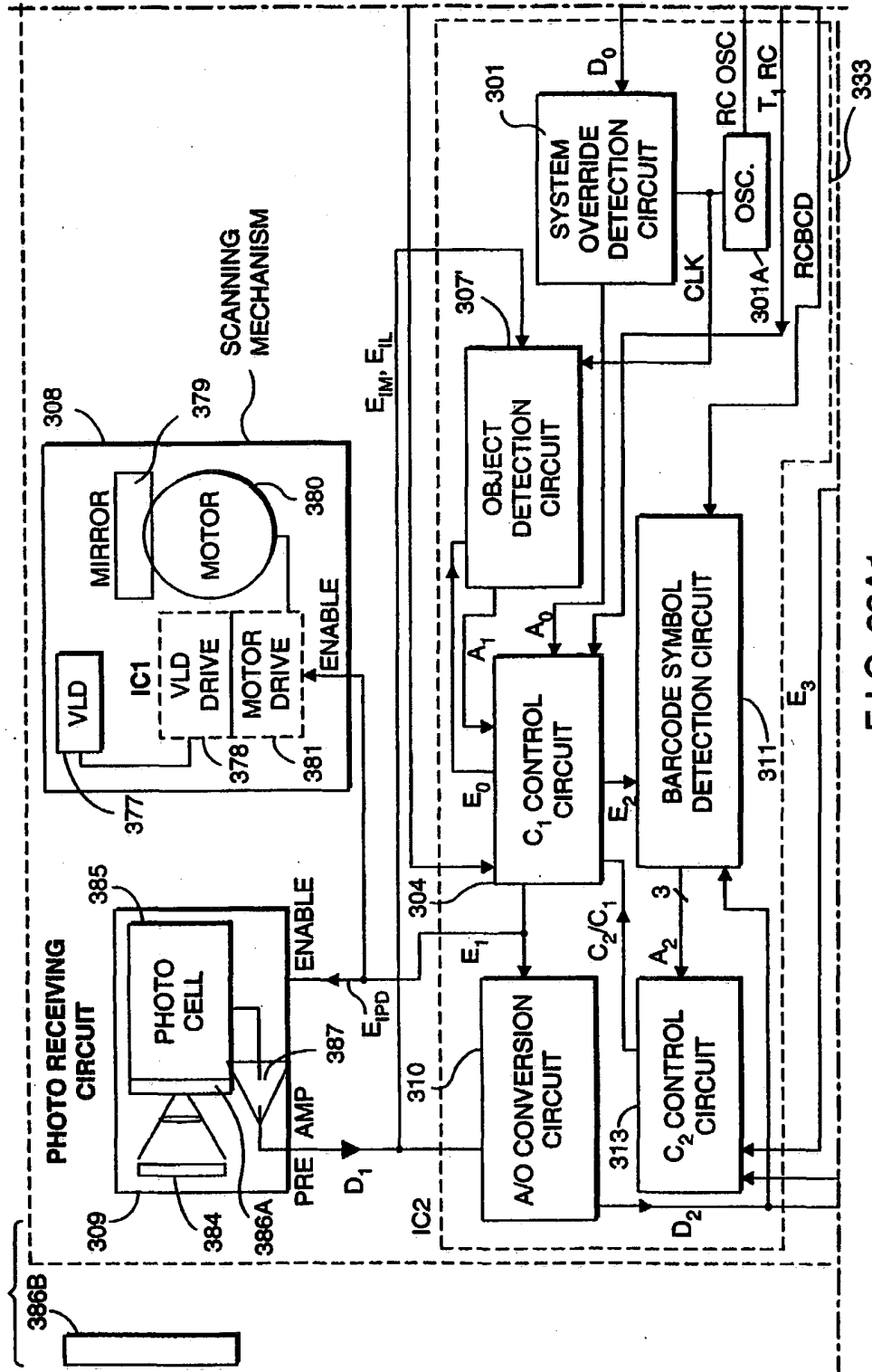


FIG. 22A1

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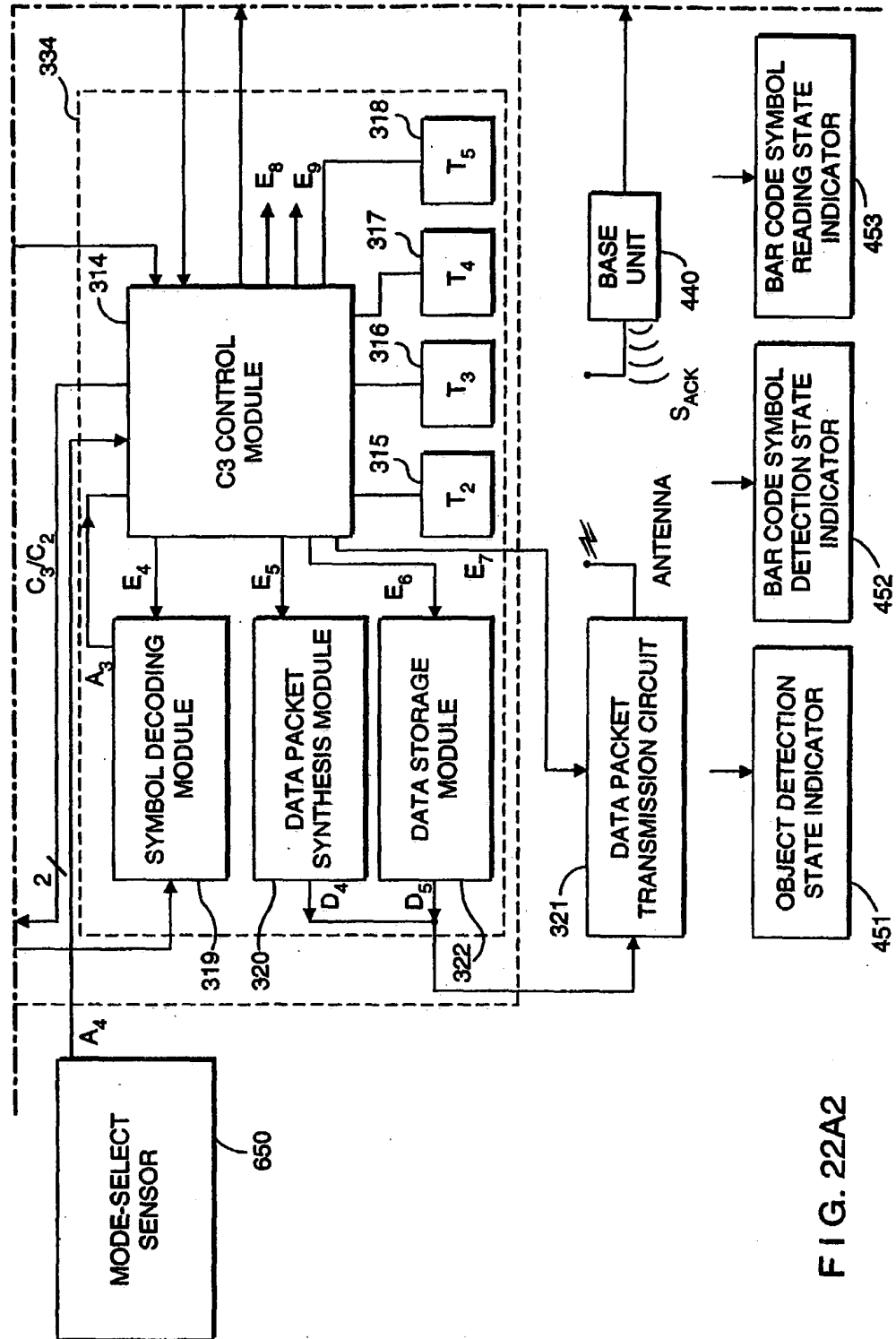


FIG. 22A2

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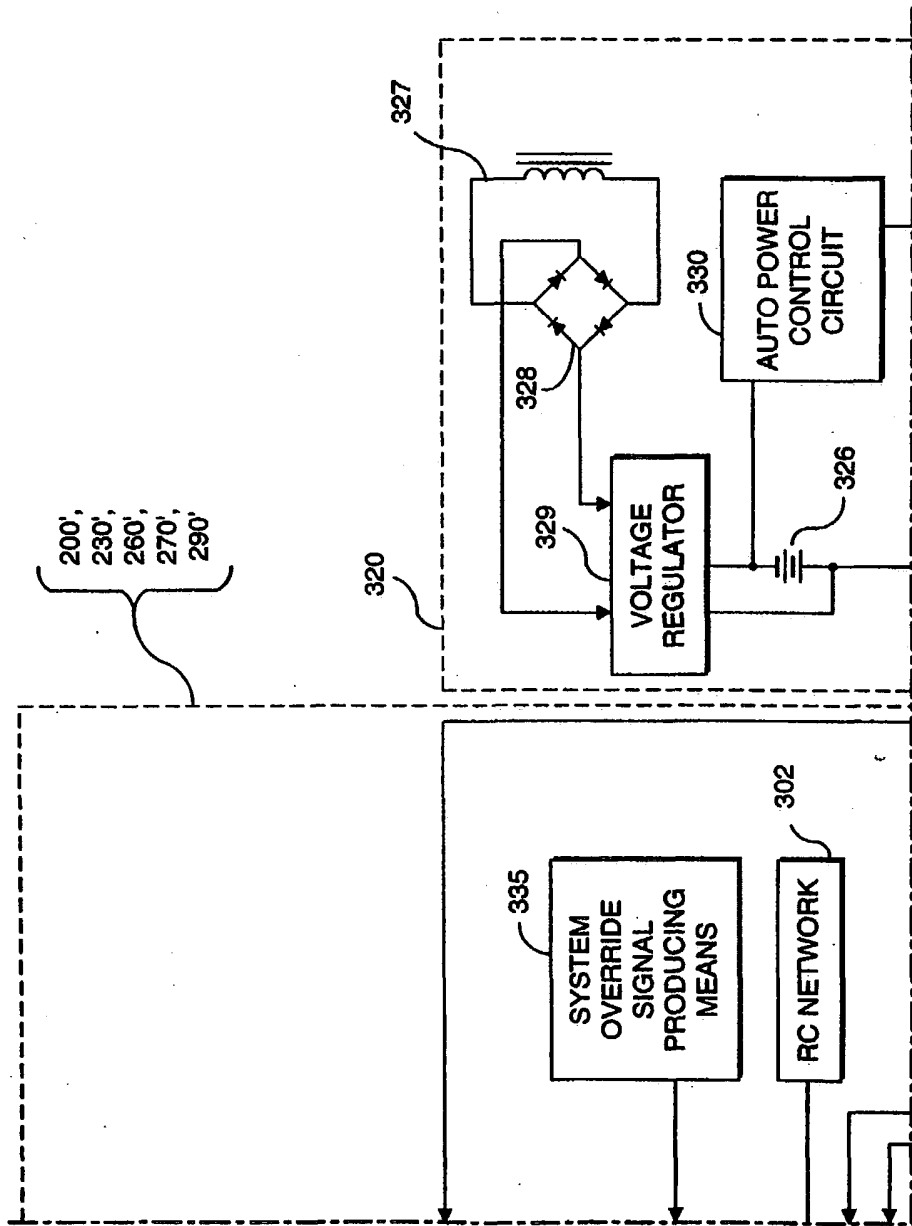
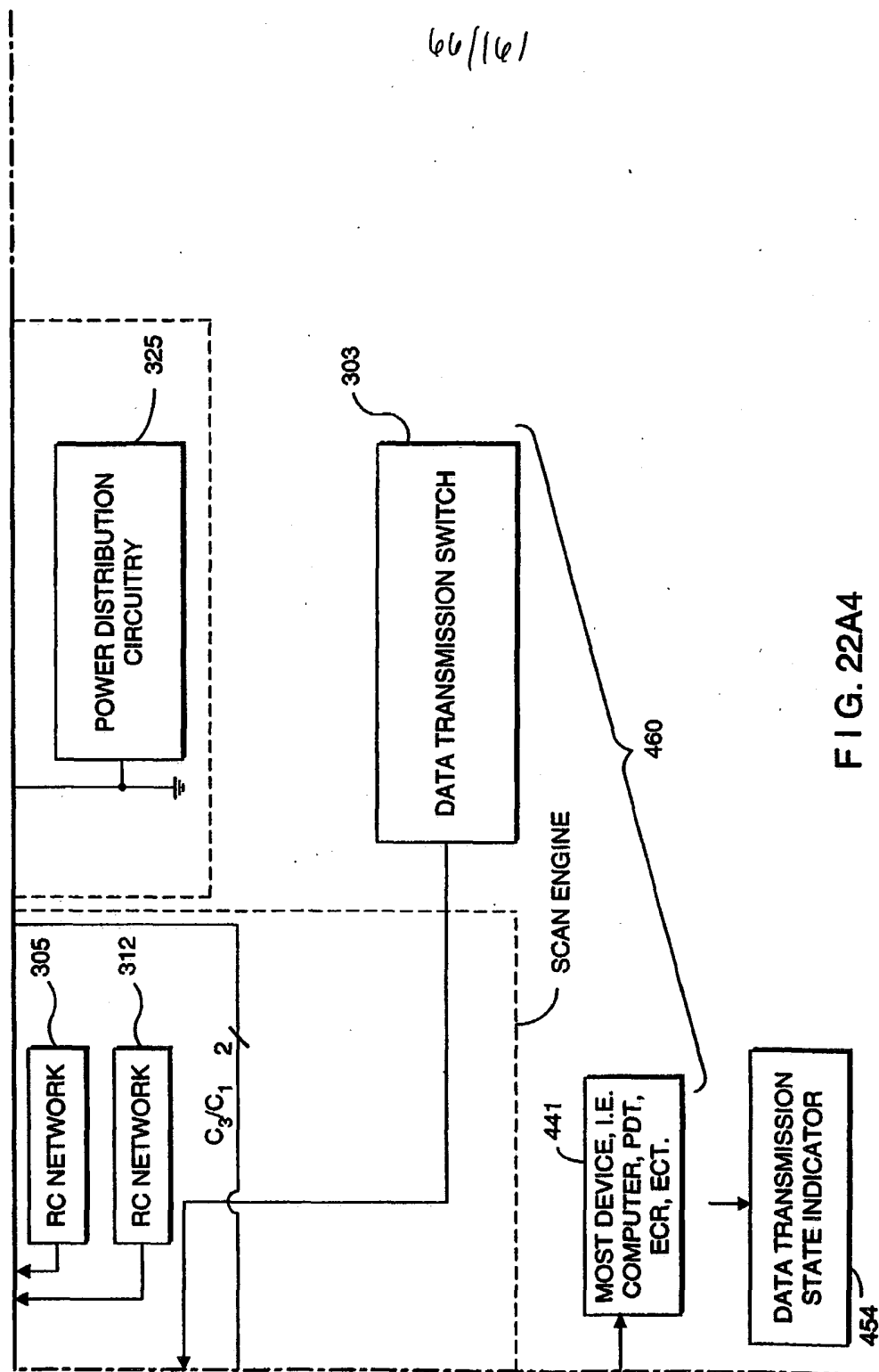


FIG. 22A3



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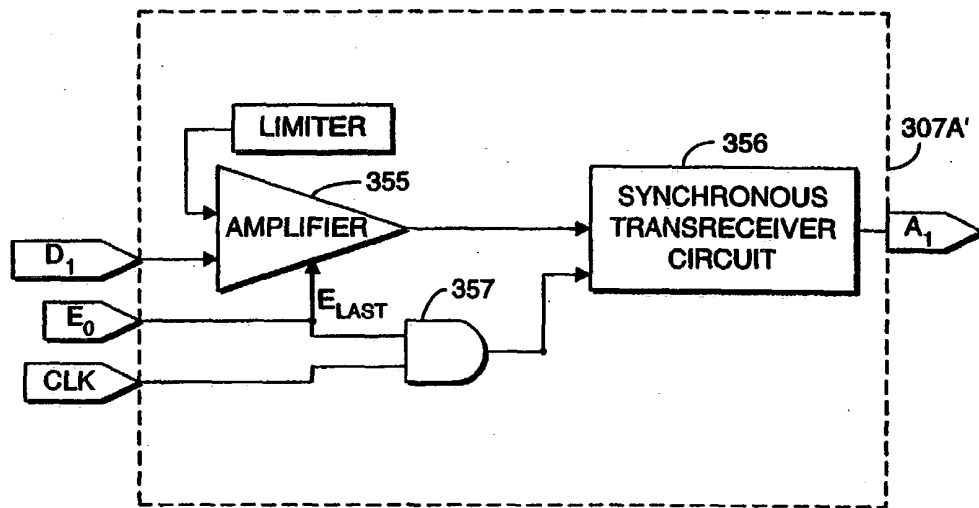


FIG. 22B

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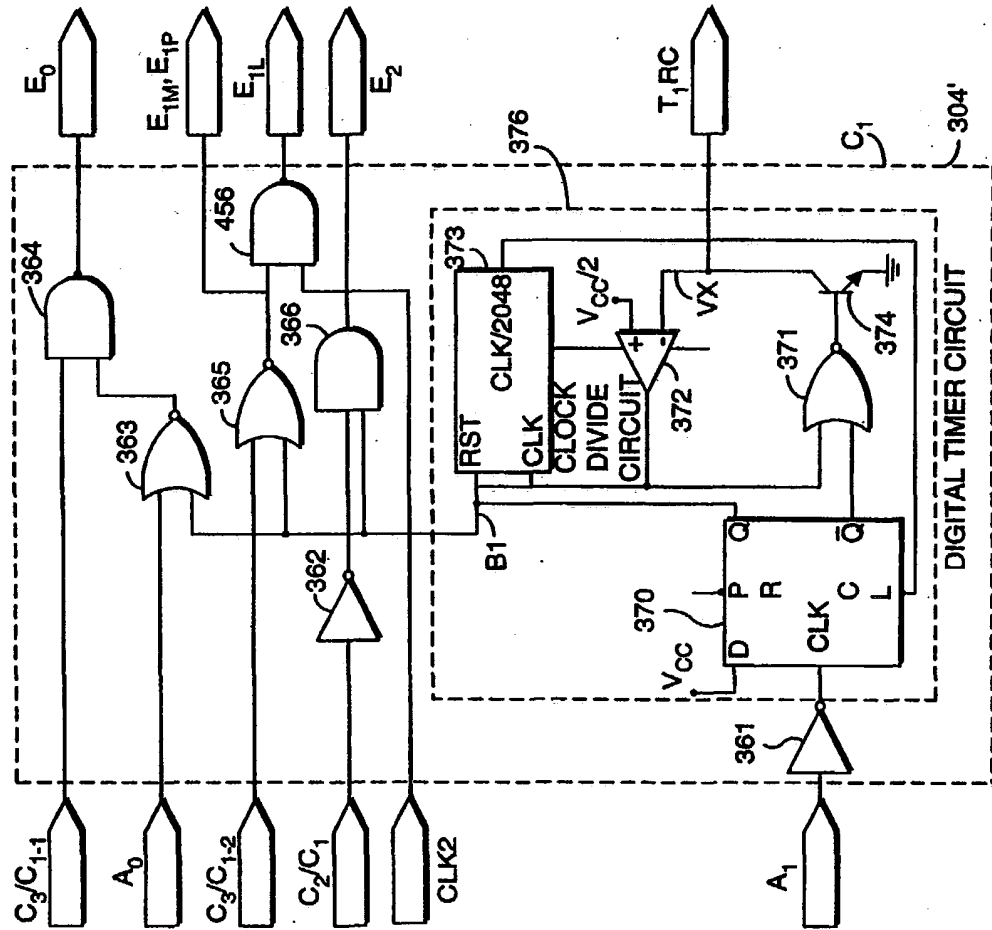


FIG. 22C

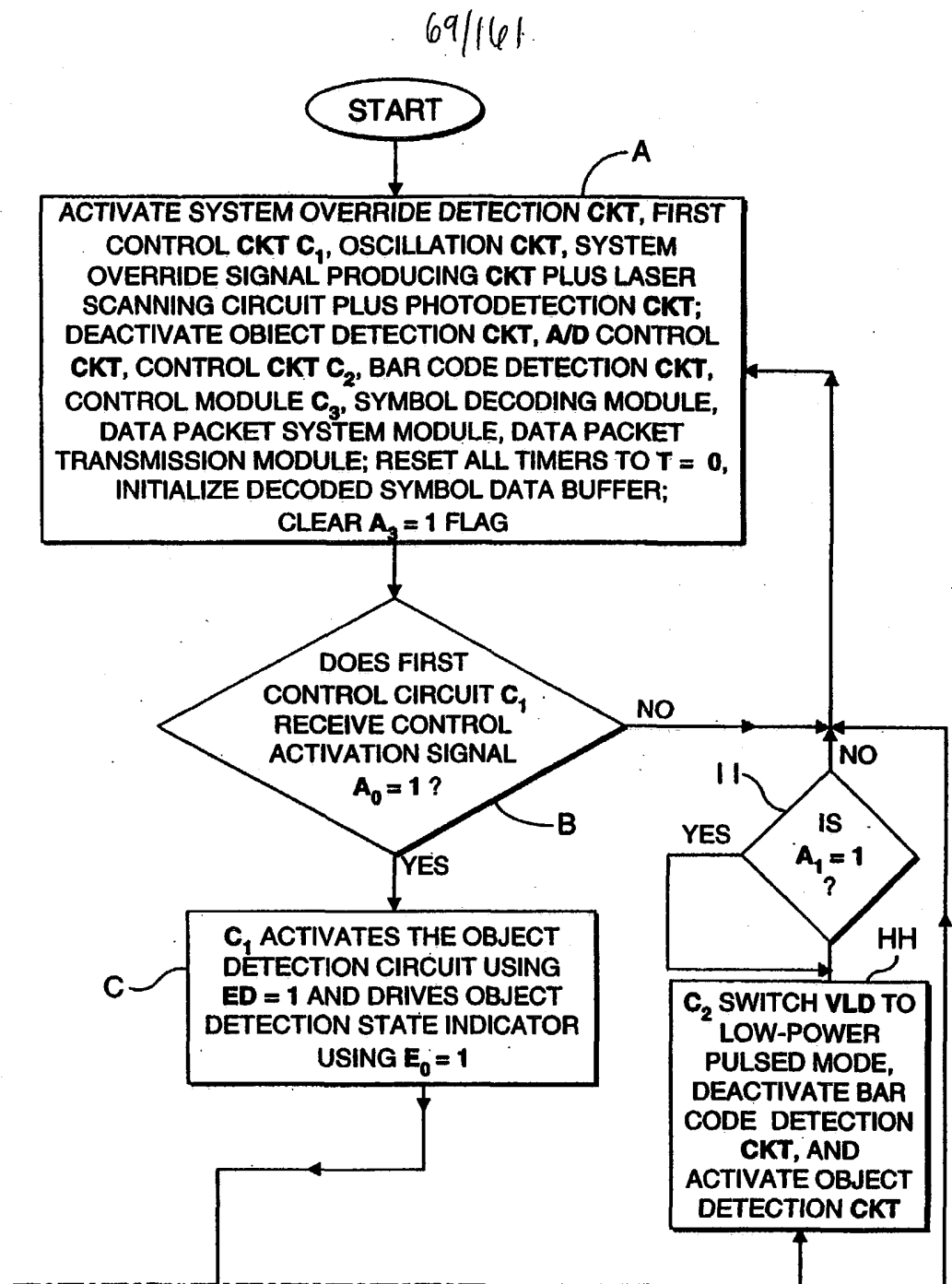


FIG. 23A1

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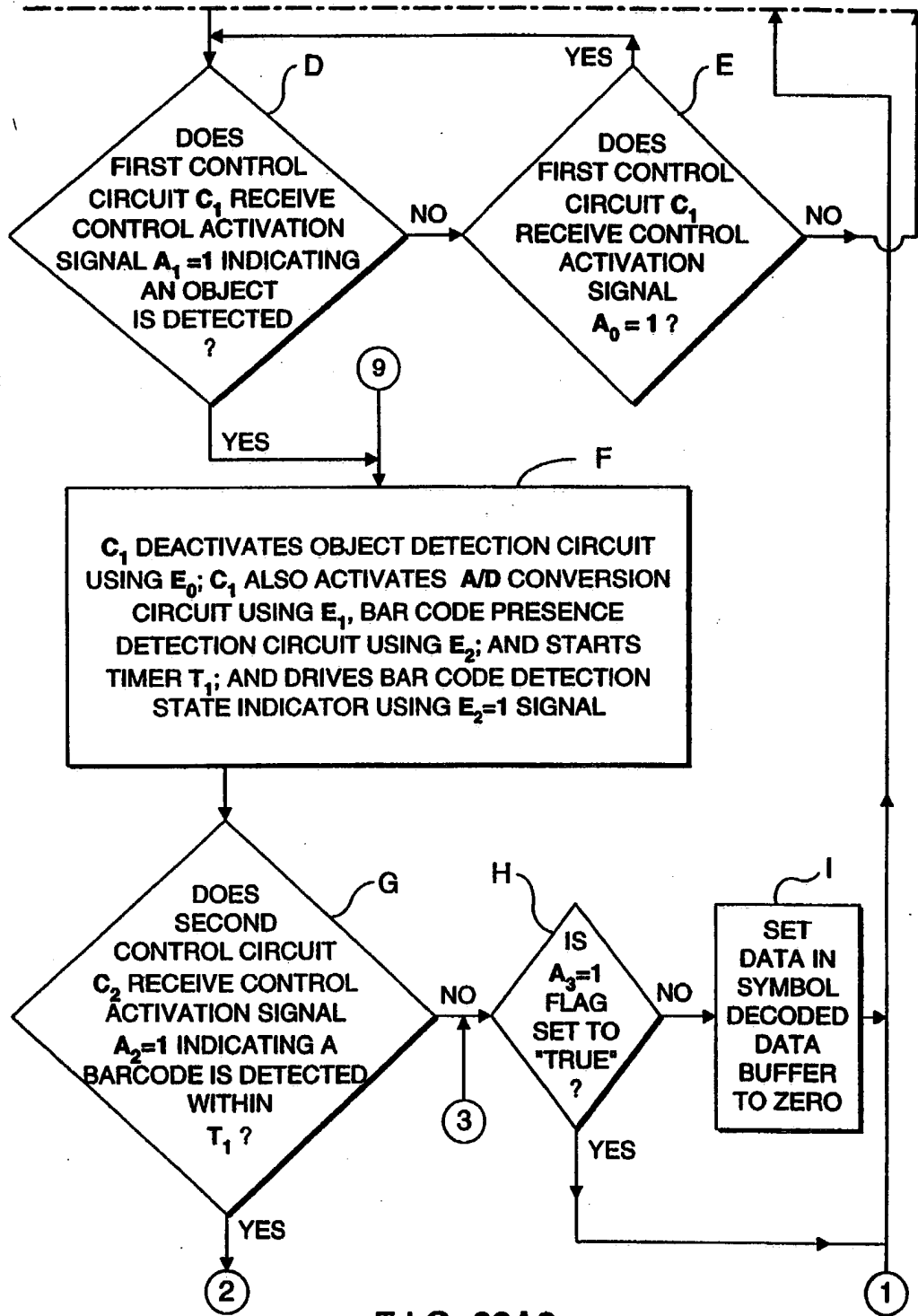
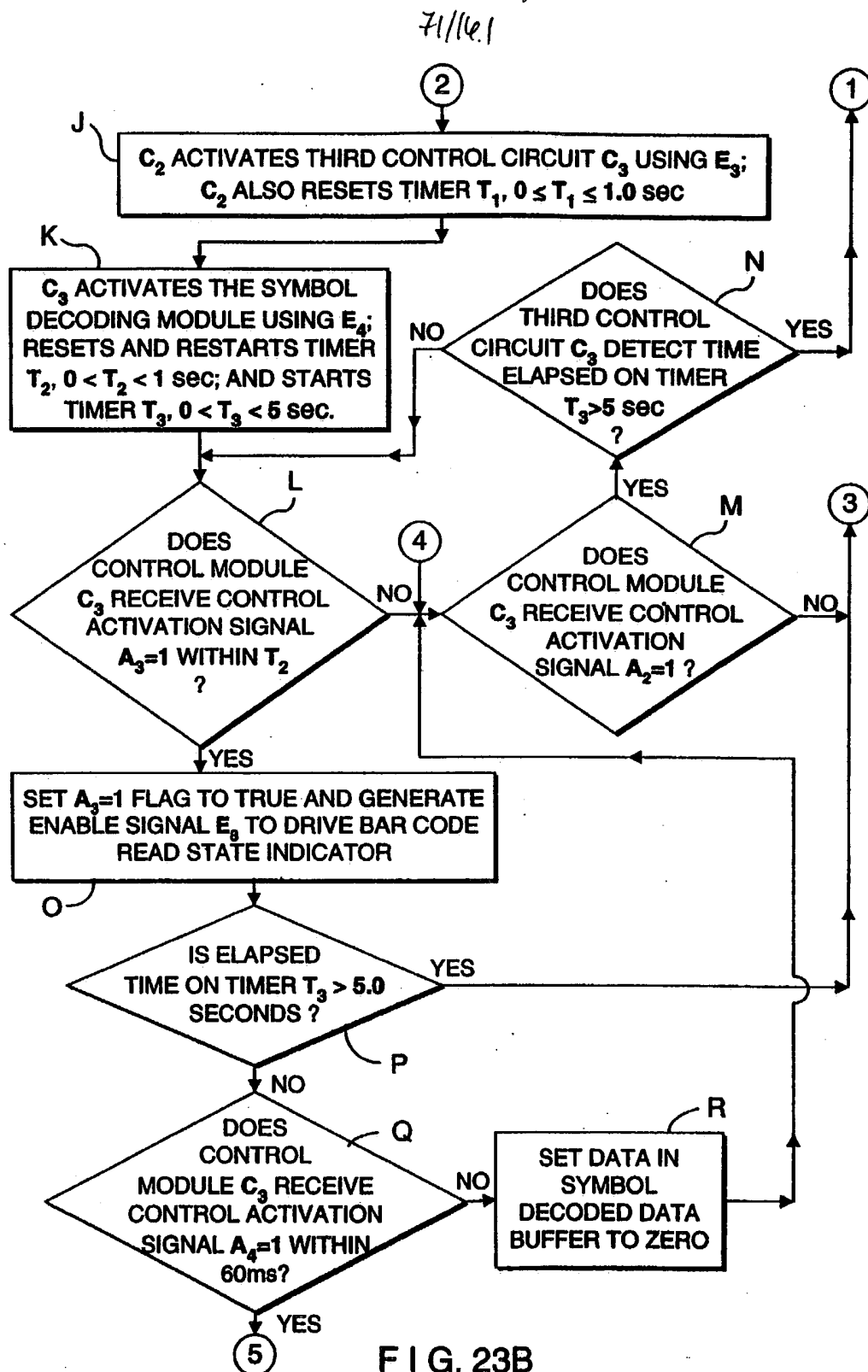


FIG. 23A2



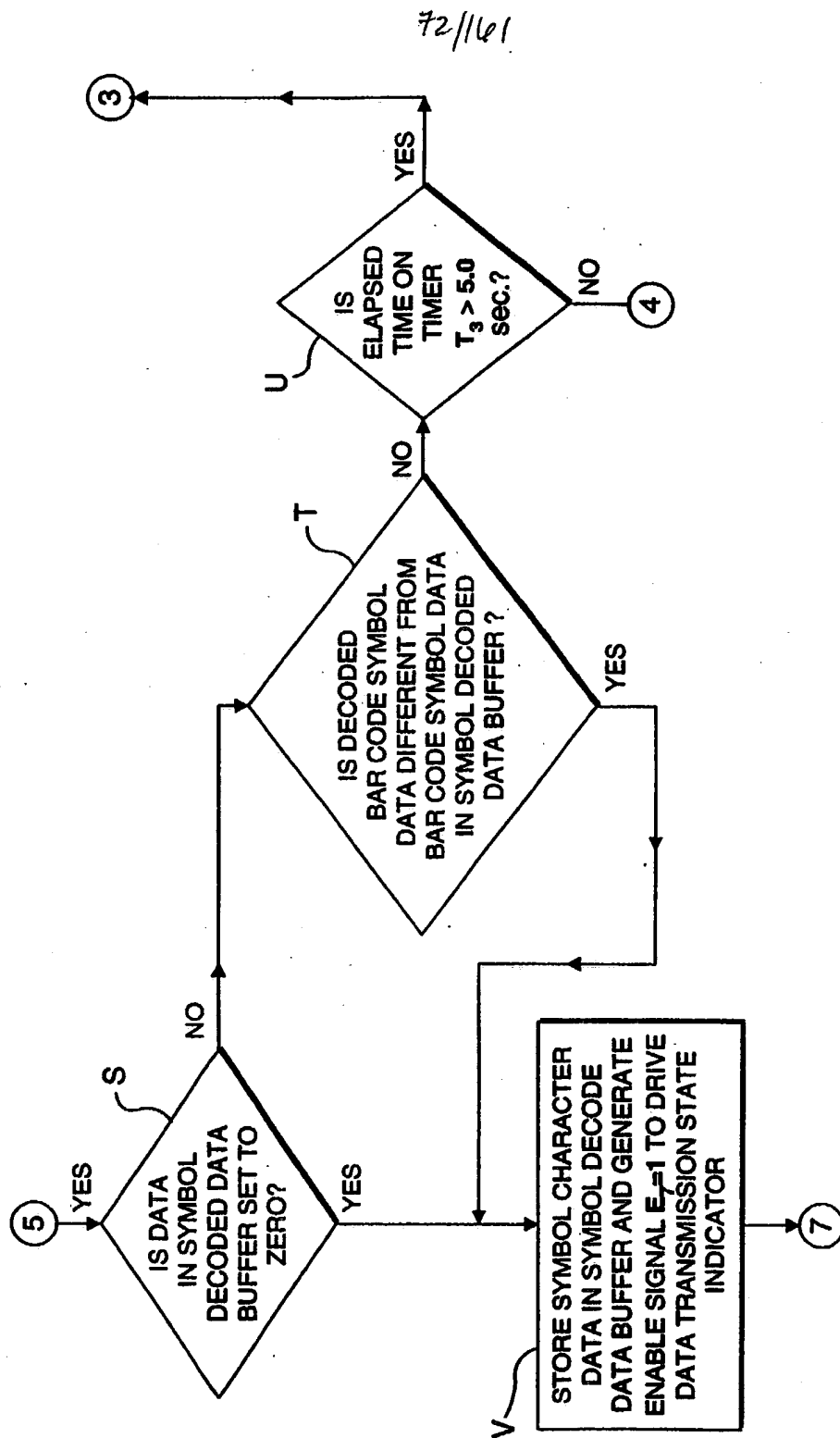


FIG. 23C

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7

THIRD CONTROL CIRCUIT C_3 CONTINUES ACTIVATION OF LASER DIODE, SCANNING MOTOR, PHOTORECEIVING CIRCUIT, A/D CONVERSION CIRCUIT; DEACTIVATES SYMBOL DECODING MODULE; AND COMMENCES ACTIVATION DATA PACKET SYNTHESIS MODULE

W

UNDER C_3 CONTROL DATA PACKET SYNTHESIS MODULE SETS PACKET NUMBER TO 1 AND INCREMENTS DATA PACKET GROUP NUMBER MODULE COUNTER

X

UNDER C_3 CONTROL DATA PACKET SYNTHESIS MODULE CONSTRUCTS DATA PACKET CONSISTING OF SYMBOL CHARACTER DATA, TRANSMITTER NUMBER, DATA PACKET GROUP NUMBER, CHECK CHARACTER AND FRAMING CHARACTERS

Y

C_3 ACTIVATES DATA PACKET TRANSMISSION CIRCUIT

Z

UNDER C_3 CONTROL DATA PACKET SYNTHESIS MODULE OUTPUTS PACKET TO DATA PACKET TRANSMISSION CIRCUIT

AA

C_3 DETERMINES IS PACKET NUMBER < 3 ?

BB

NO

8

YES

UNDER C_3 CONTROL DATA PACKET SYNTHESIS MODULE INCREMENTS DATA PACKET GROUP NUMBER

CC

C_3 ALLOWS T_5 TO EXPIRE IN ORDER TO DELAY TRANSMISSION BASED ON LAST TWO DIGITS OF TRANSMITTER NUMBER

DD

FIG. 23D

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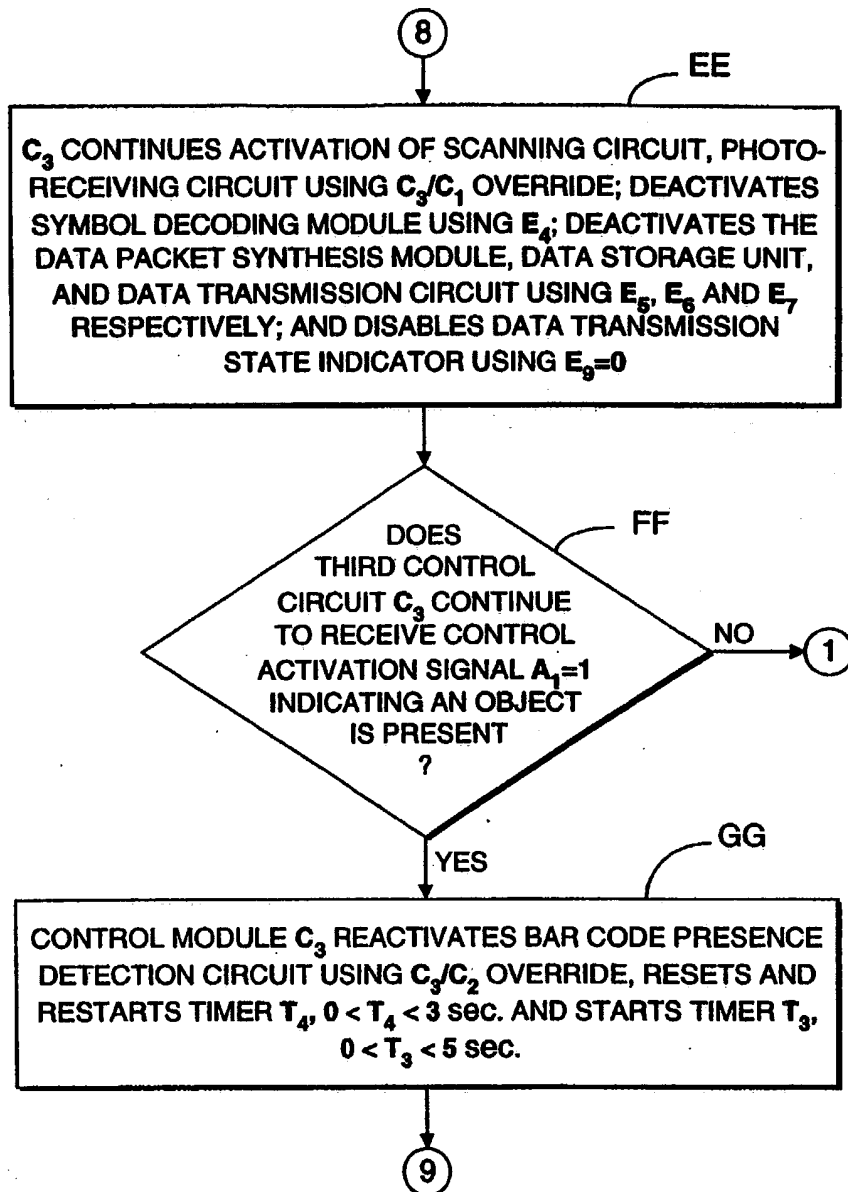


FIG. 23E

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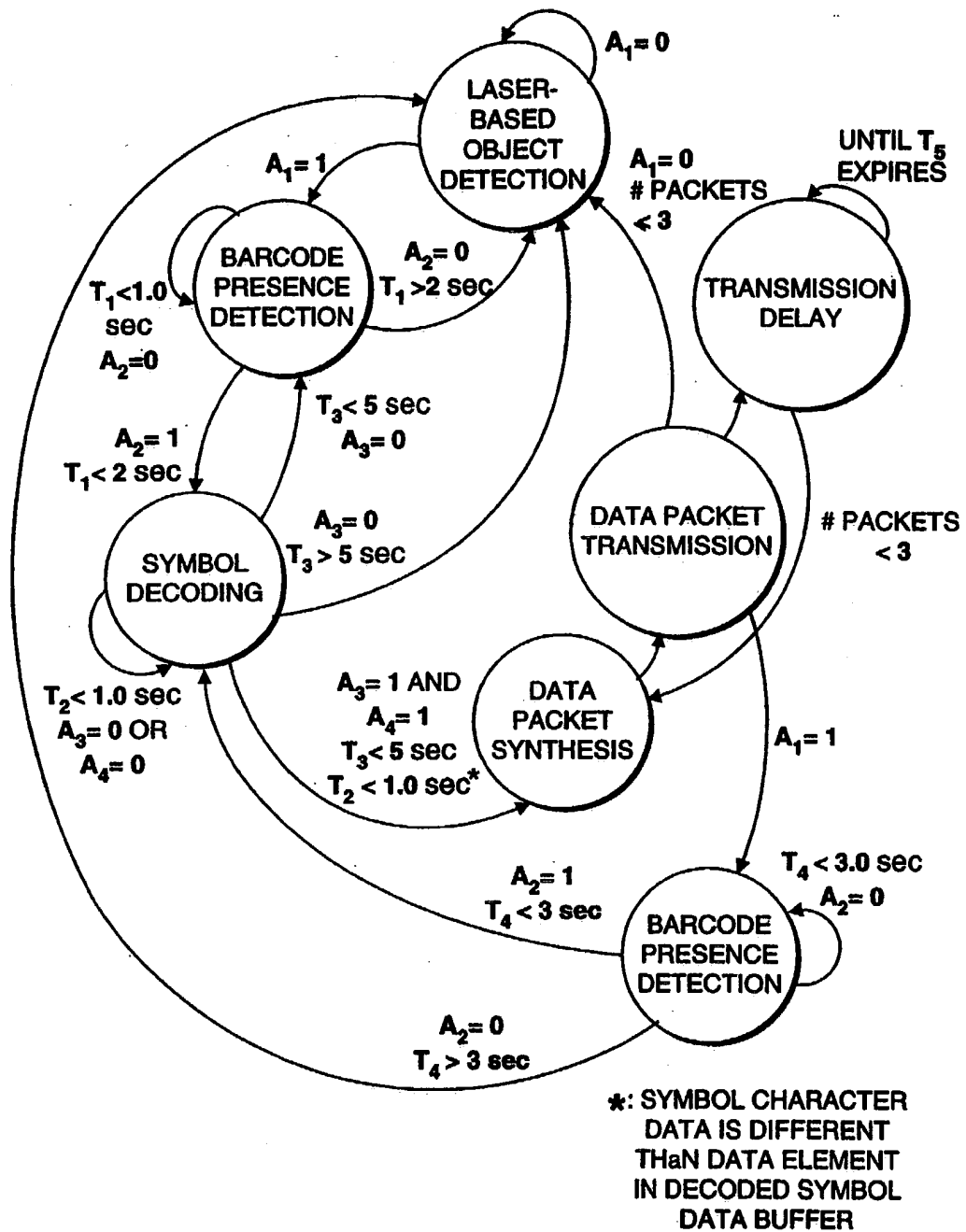


FIG. 24

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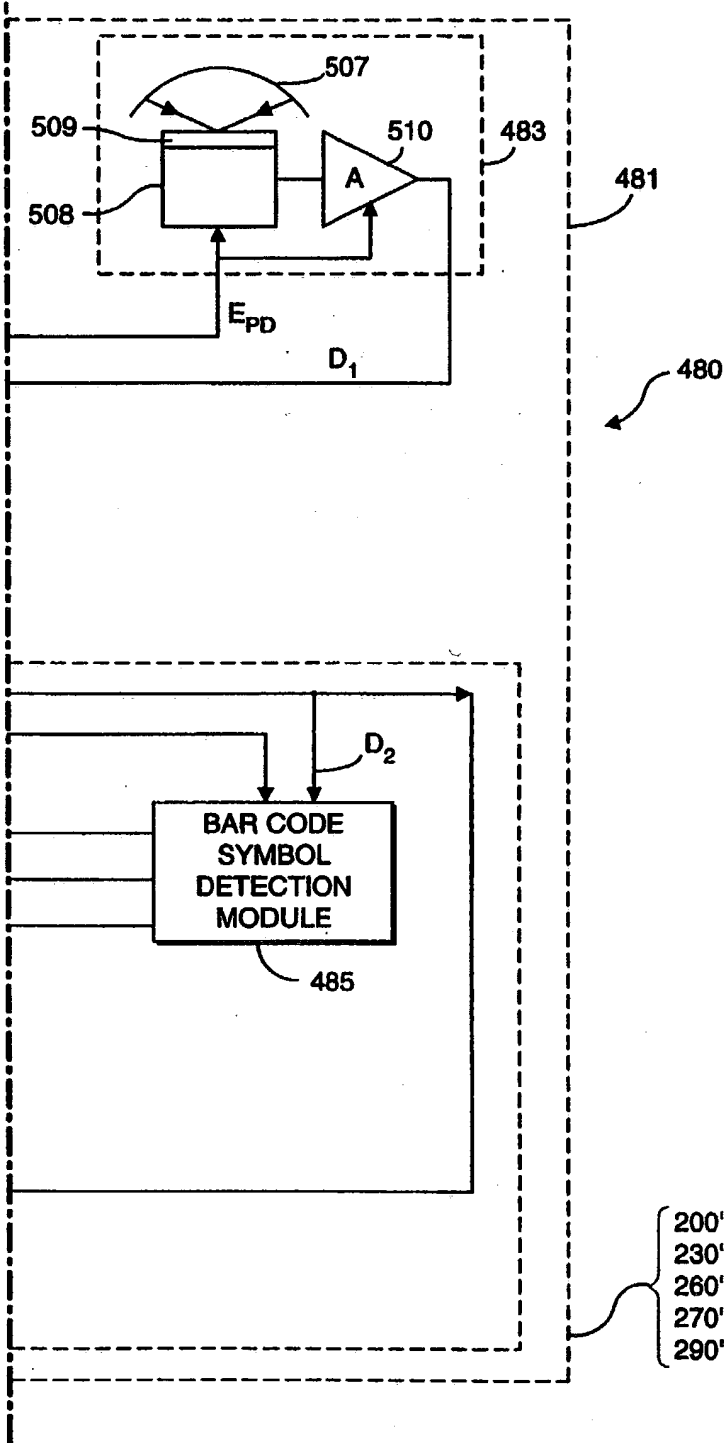


FIG. 25B

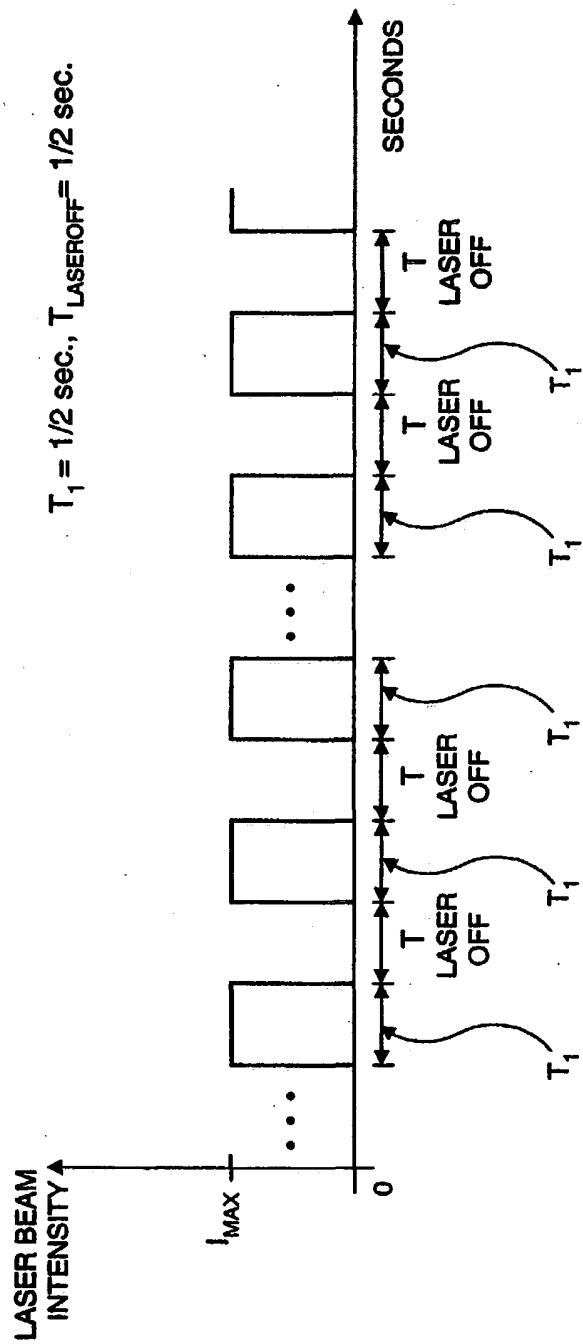
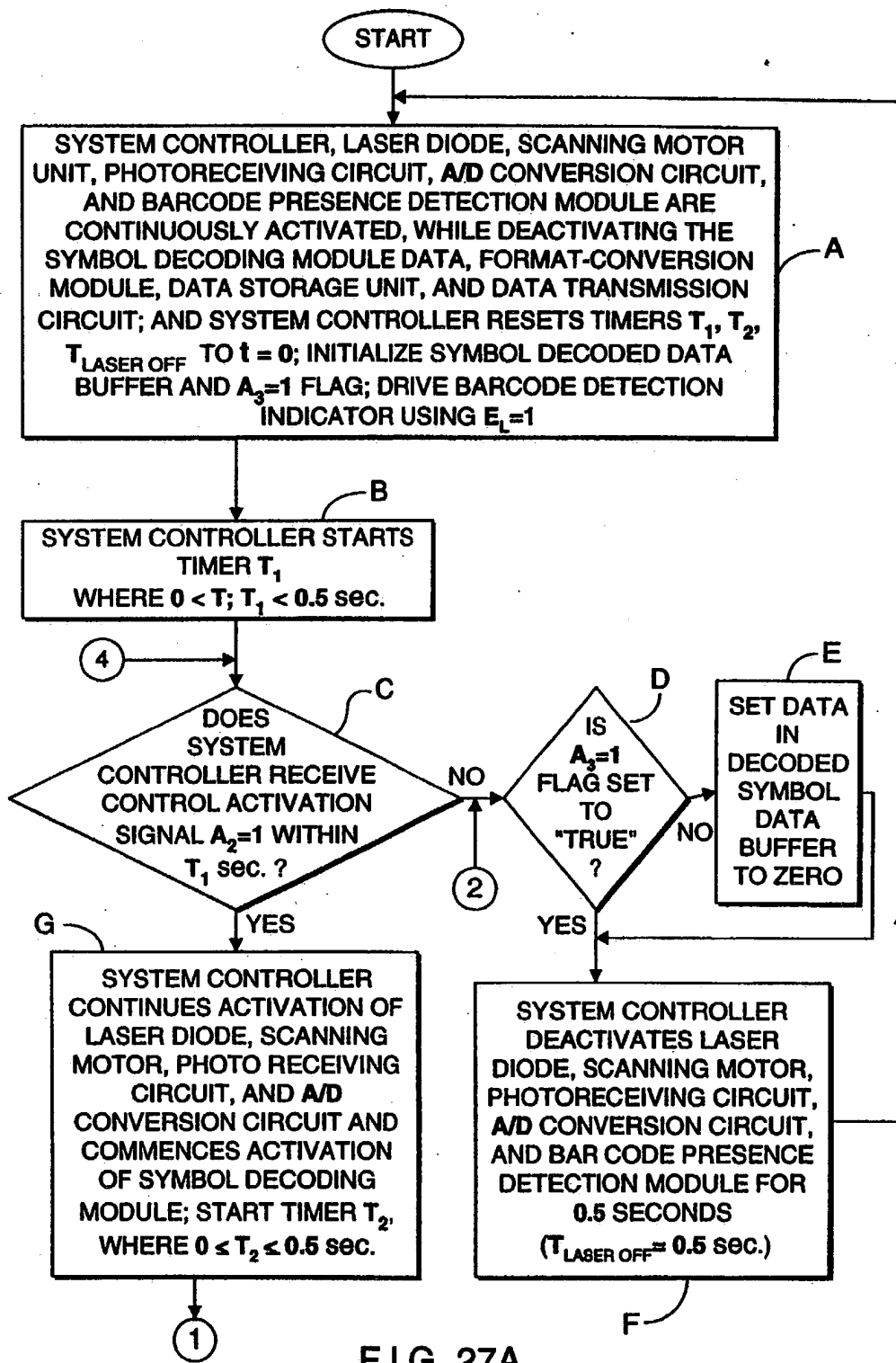


FIG. 26

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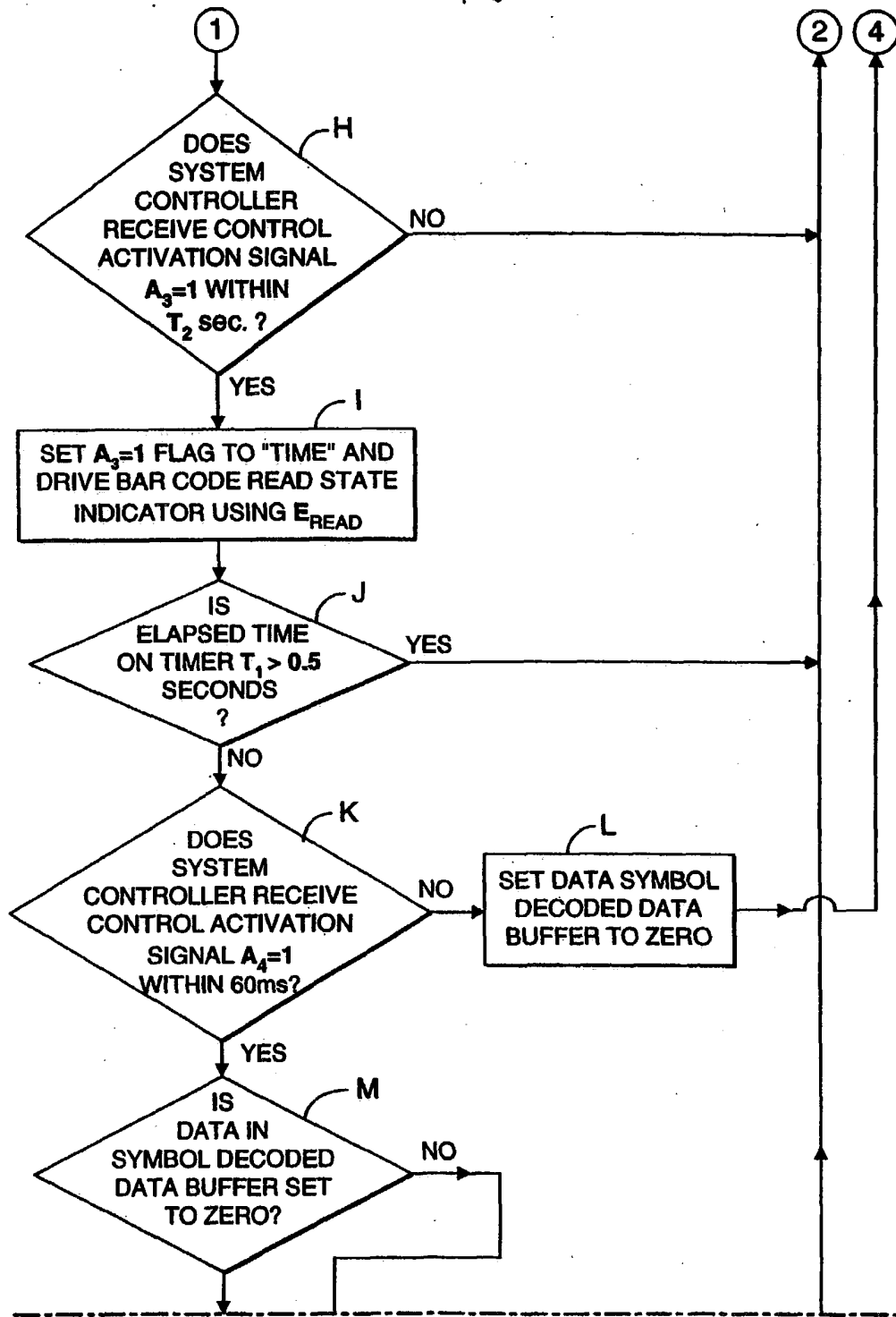


FIG. 27B1

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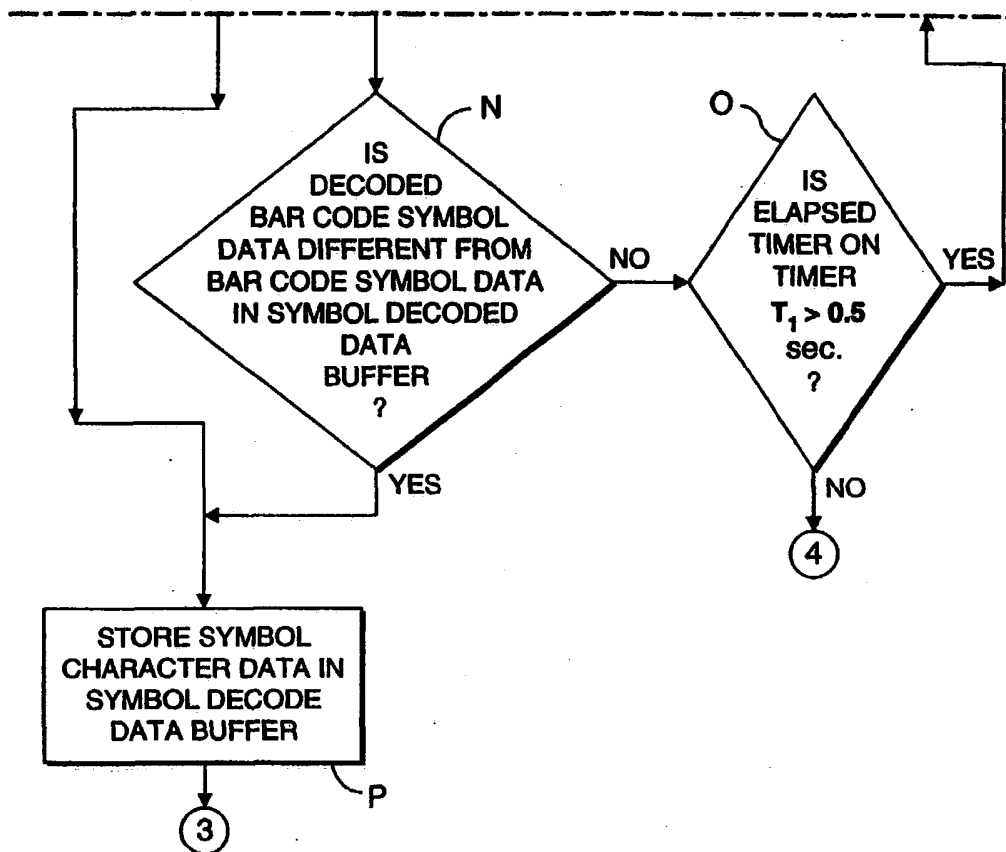


FIG. 27B2

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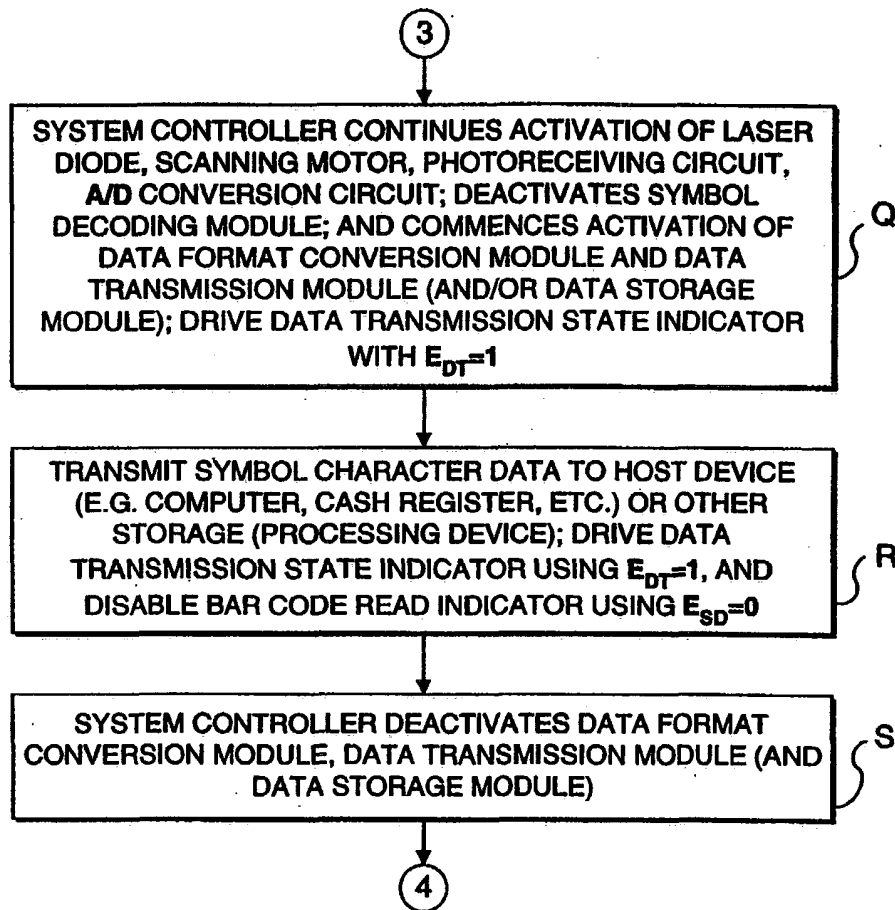


FIG. 27C

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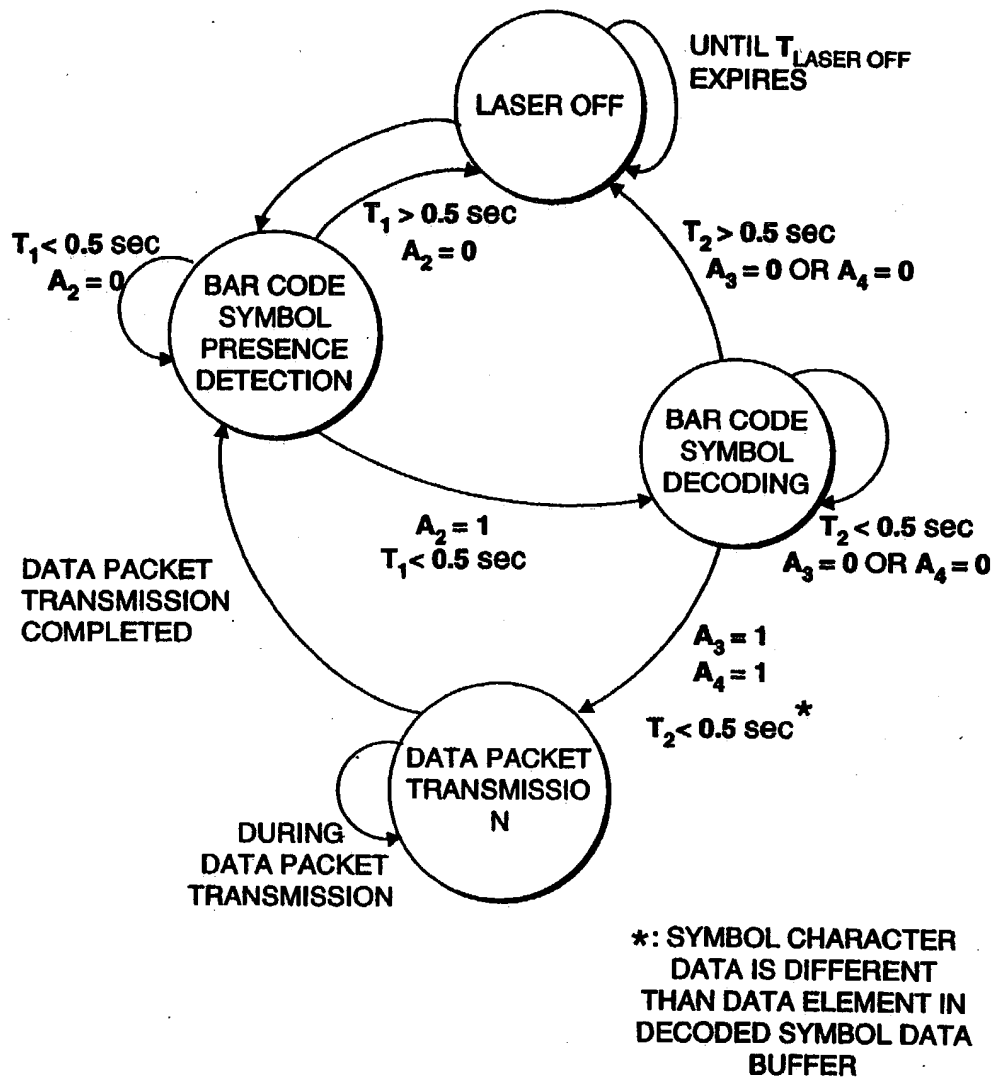


FIG. 28

FIG. 29A1

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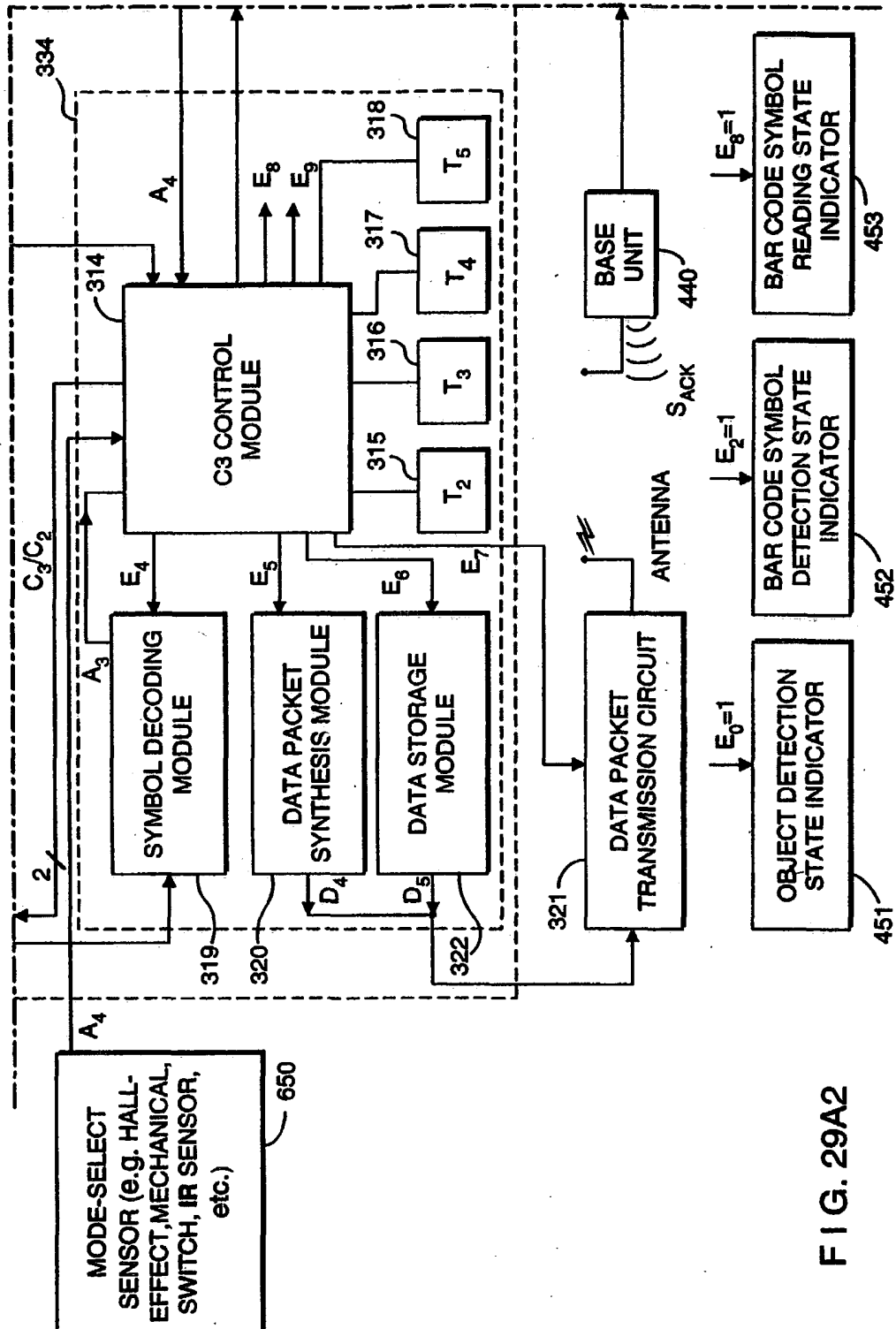


FIG. 29A2

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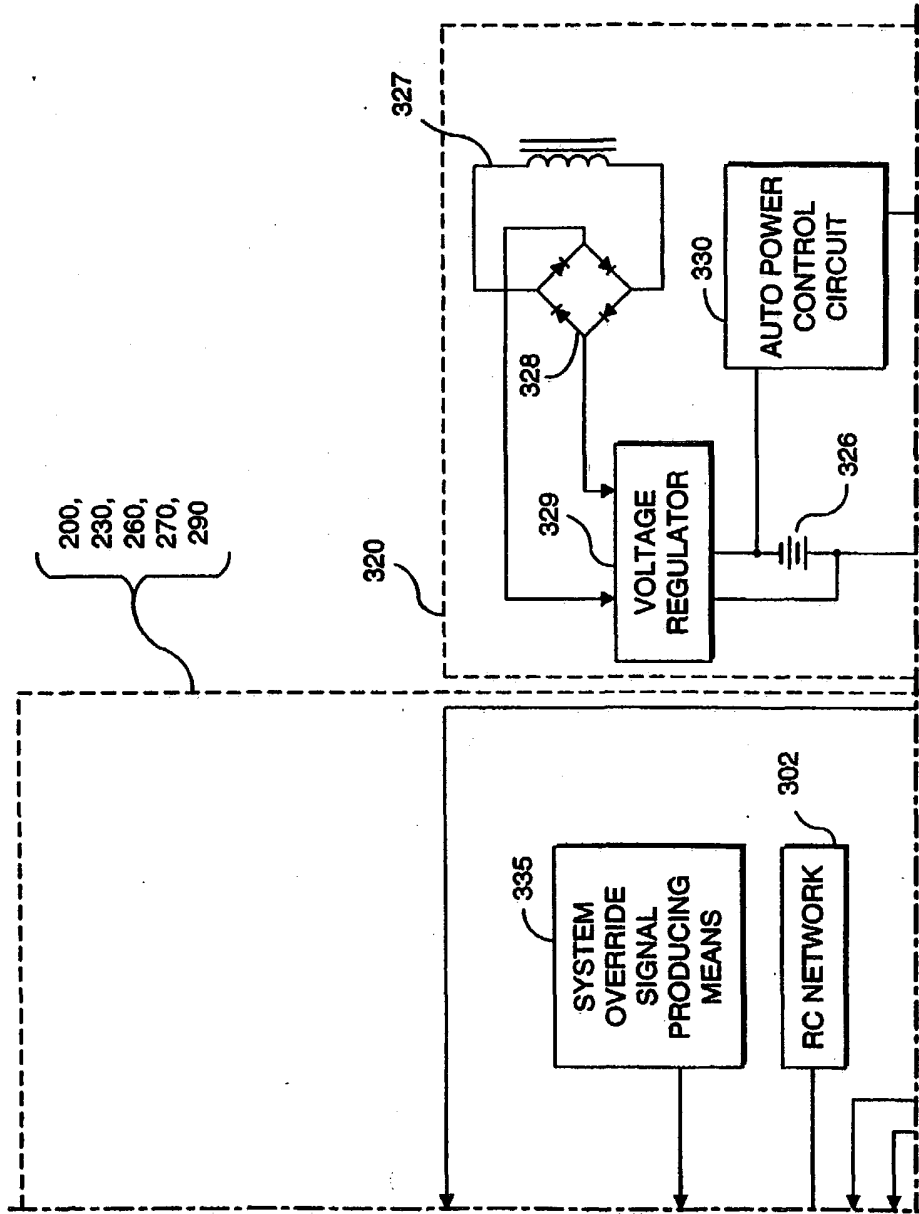


FIG. 29A3

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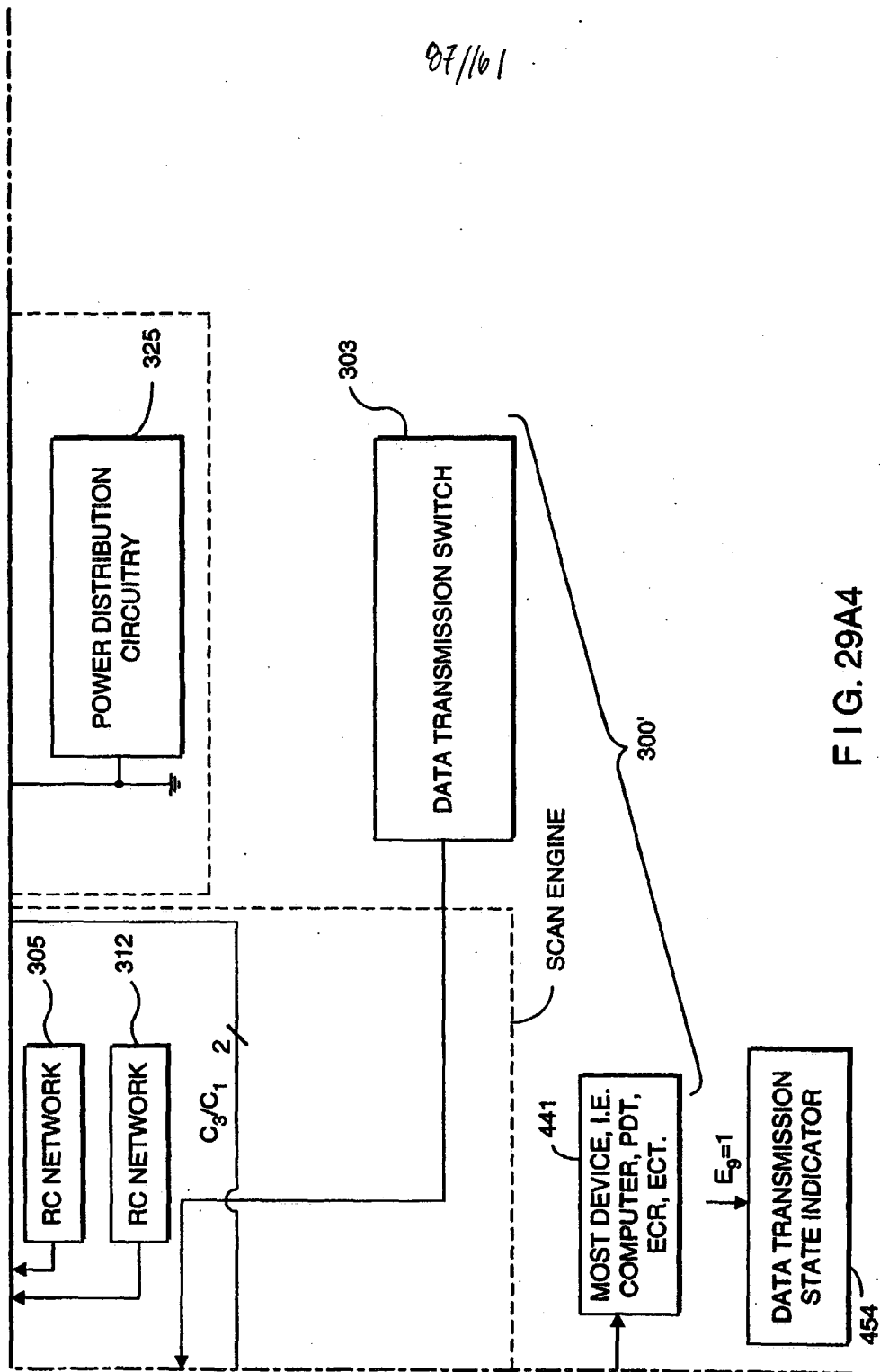


FIG. 29A4

88//61

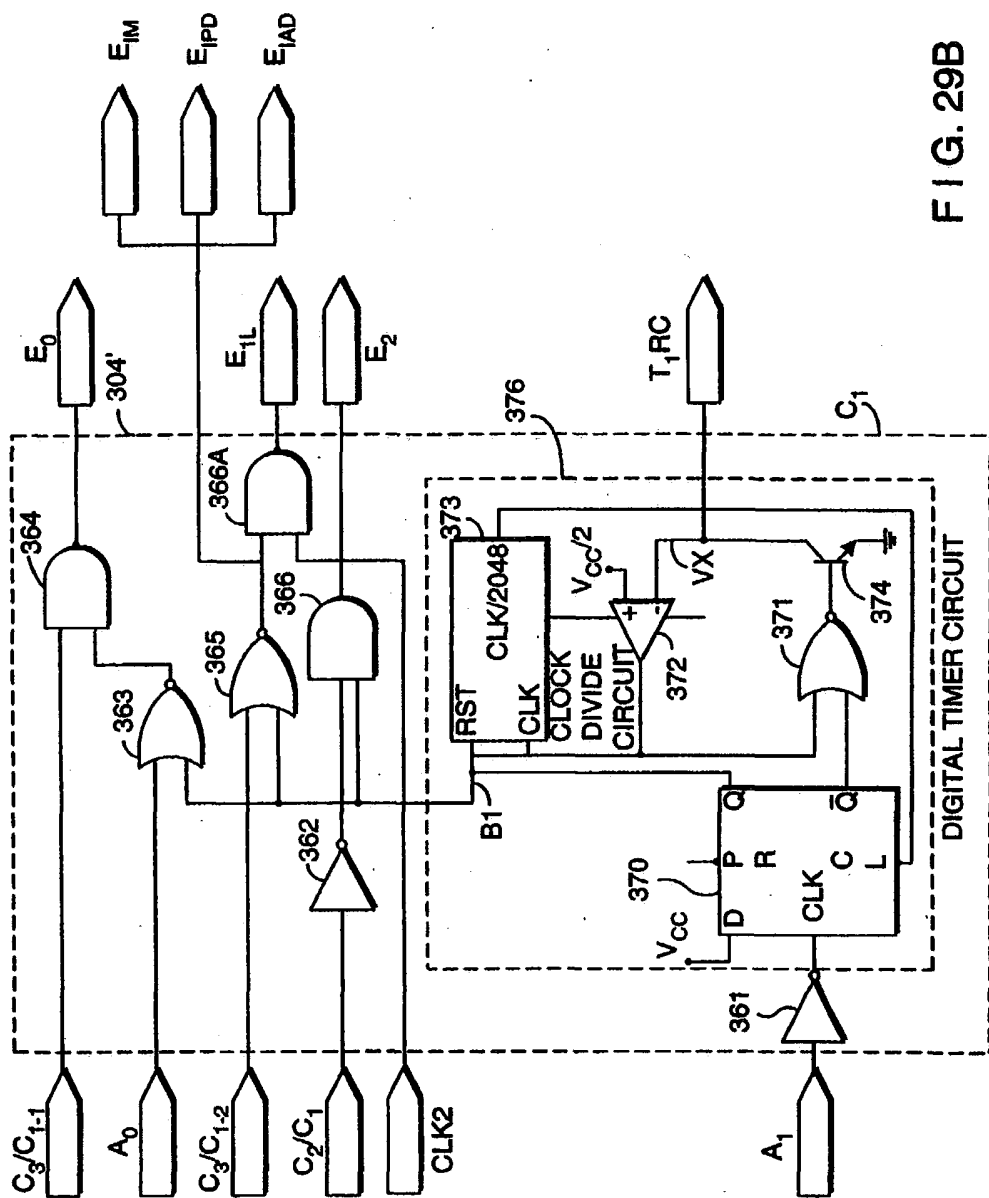


FIG. 29B

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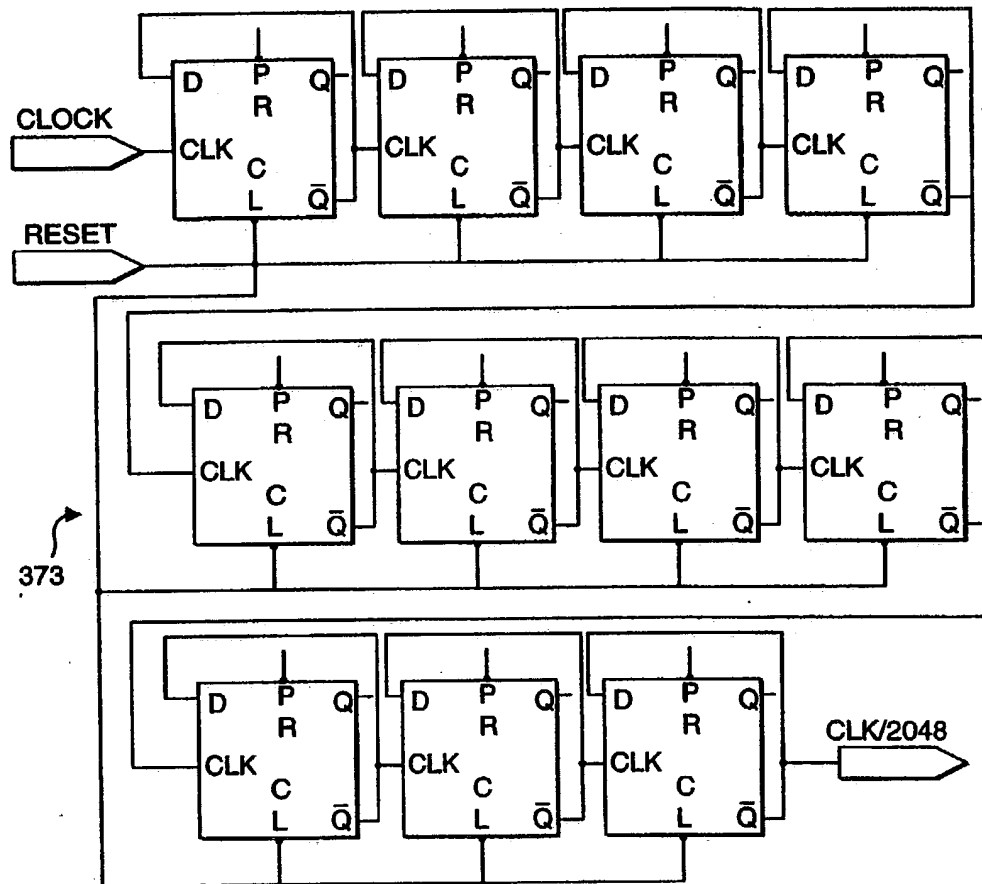


FIG. 29C

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$$\left\{ \begin{array}{l} E_0 = \overline{(B1 + A_0) (C_3 / C_{1-1})} \\ E_{IM} = E_{IPD} = E_{IAD} = \overline{(C_3 / C_{1-2}) + B1} \\ E_L = \overline{[(C_3 / C_{1-1}) + B1]} [B2] \\ E_2 = \overline{(C_2 / C_1) (B1)} \end{array} \right.$$

FIG. 29D

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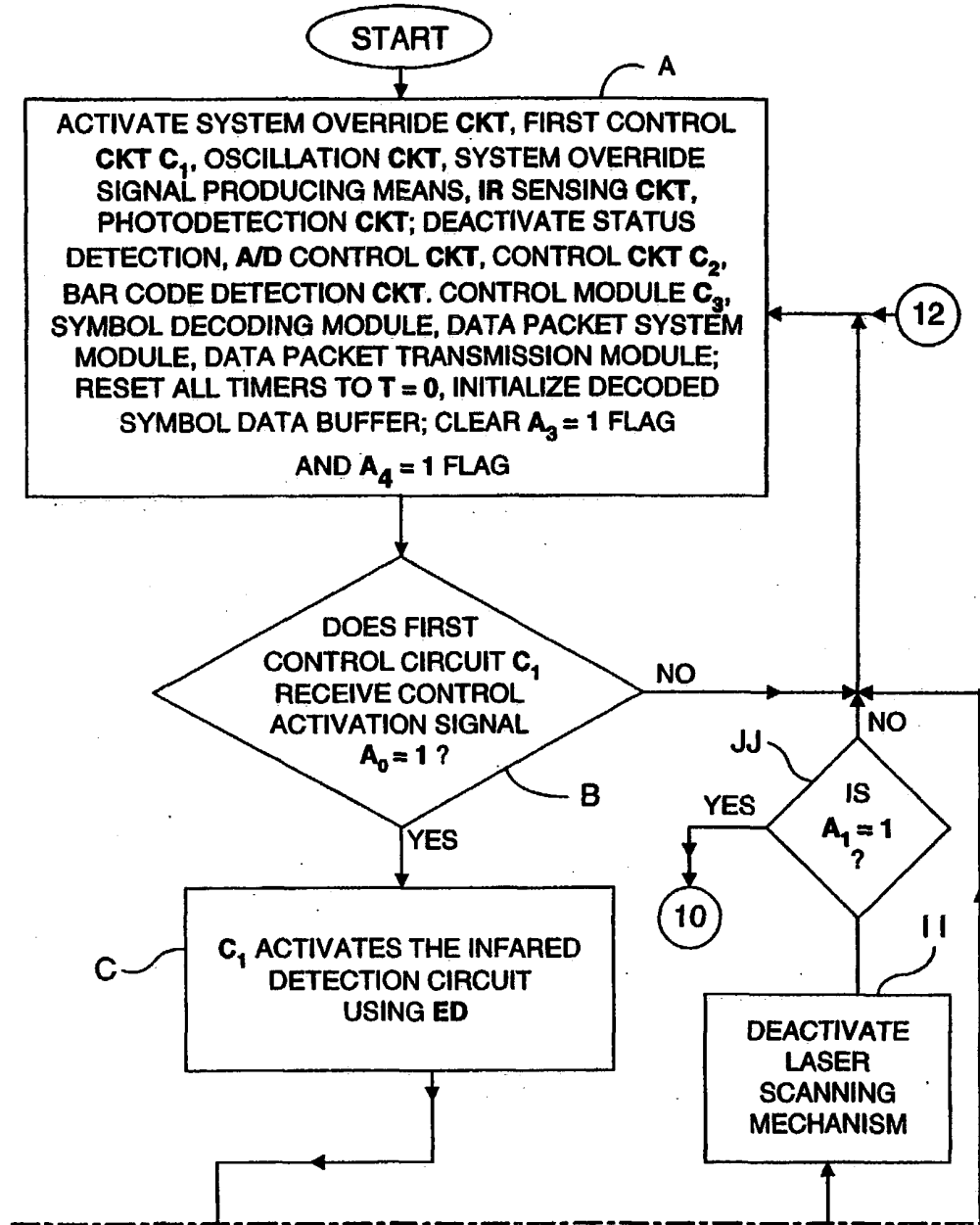


FIG. 30A1

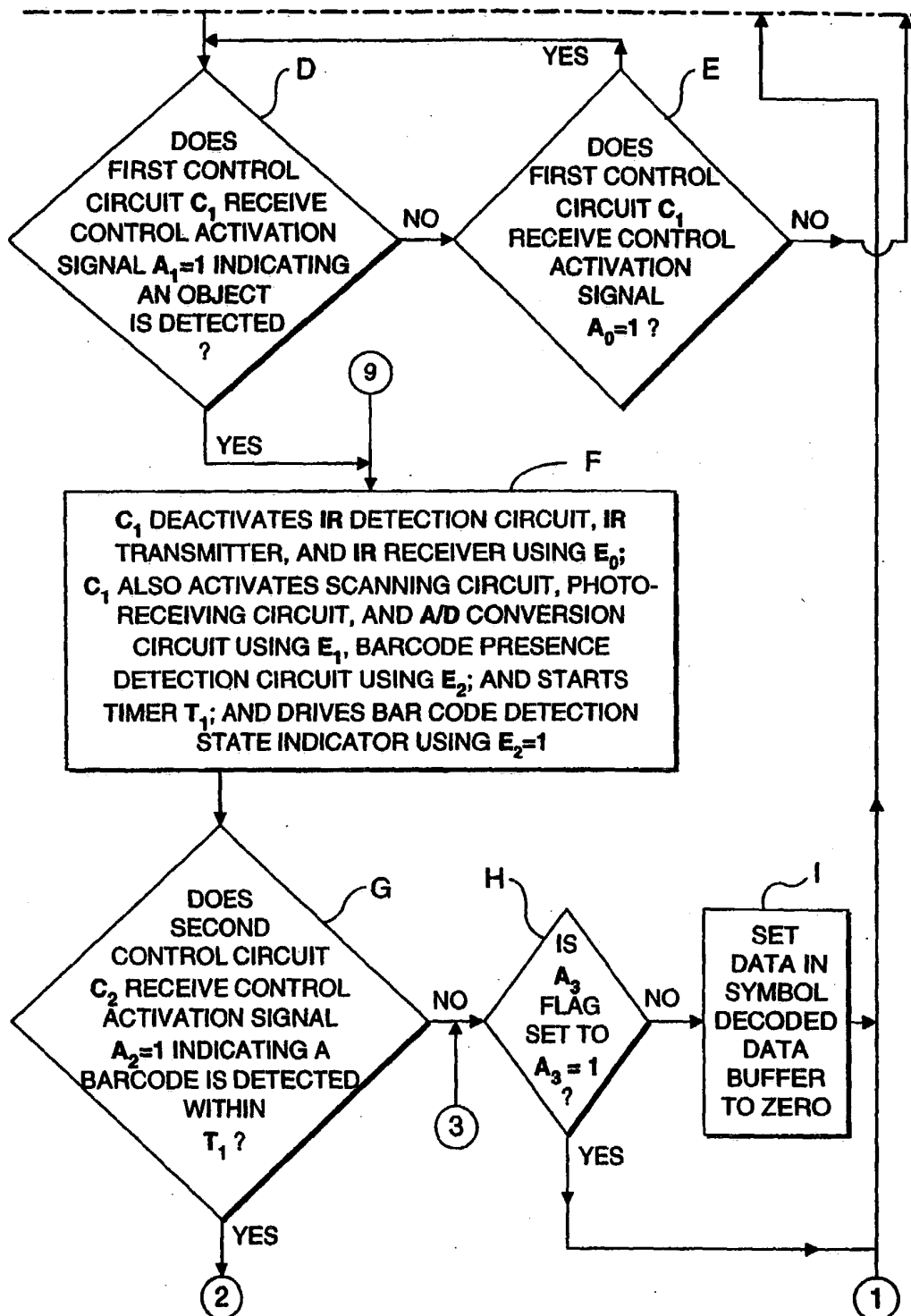


FIG. 30A2

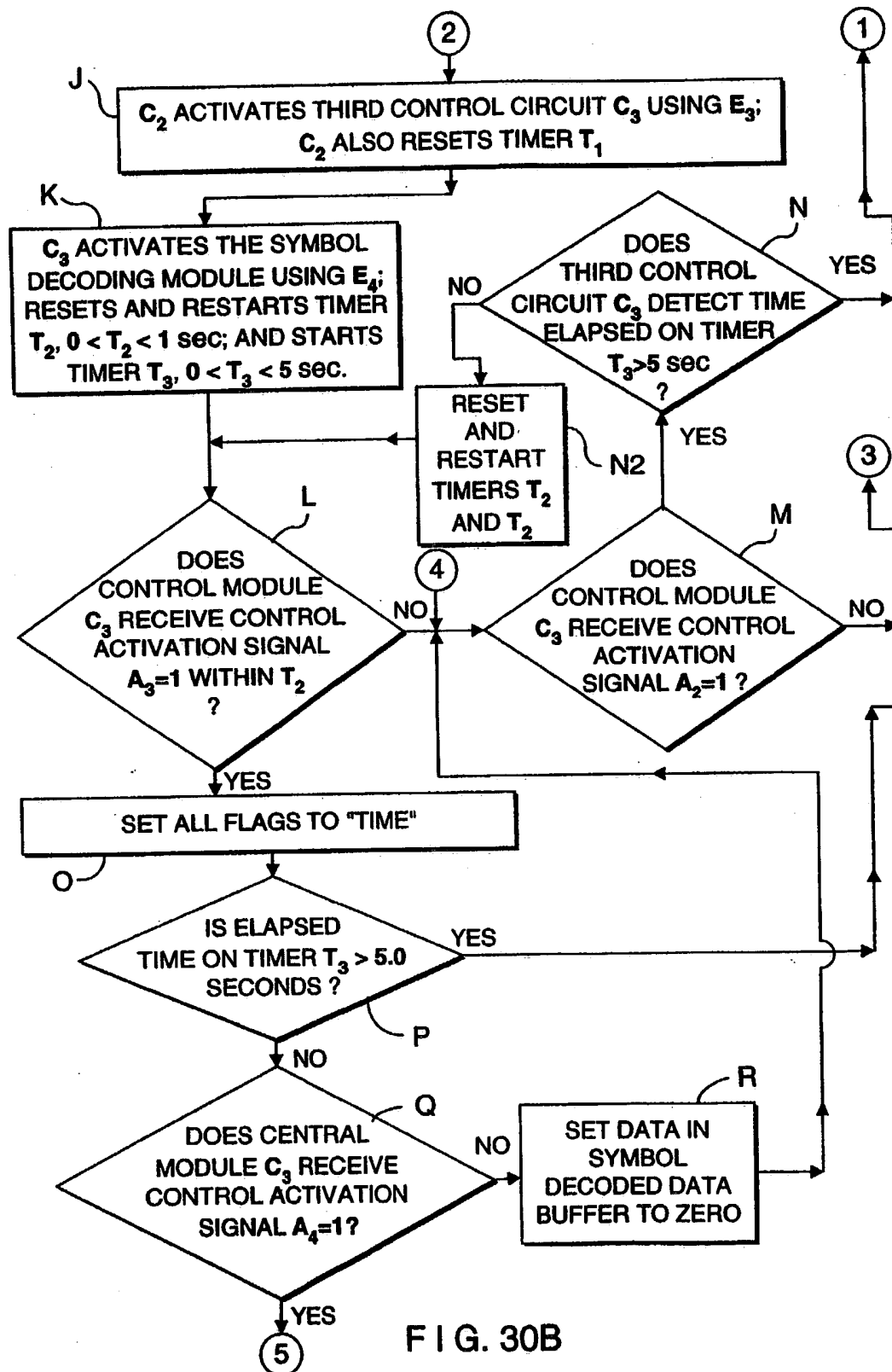


FIG. 30B

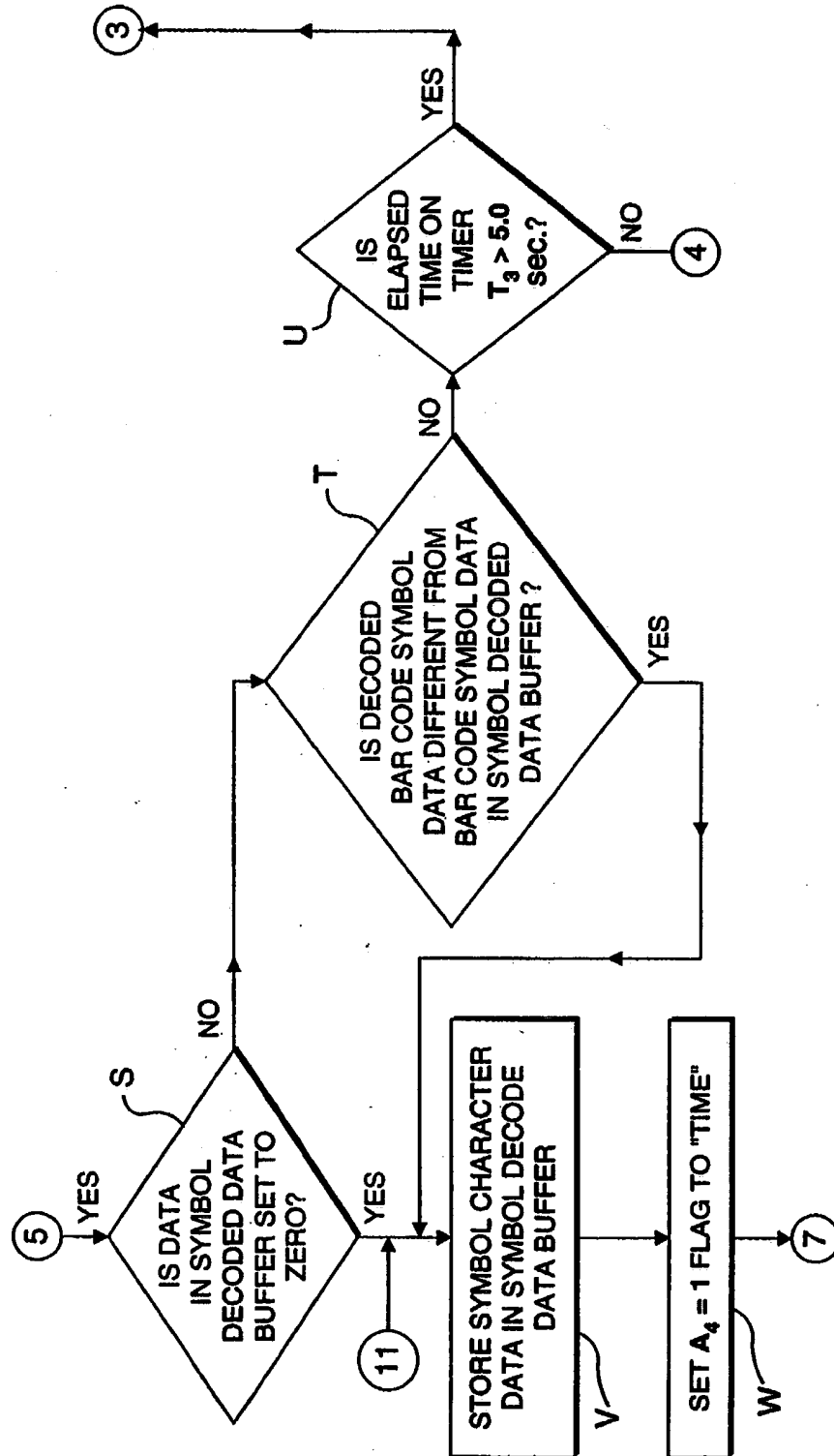


FIG. 30C

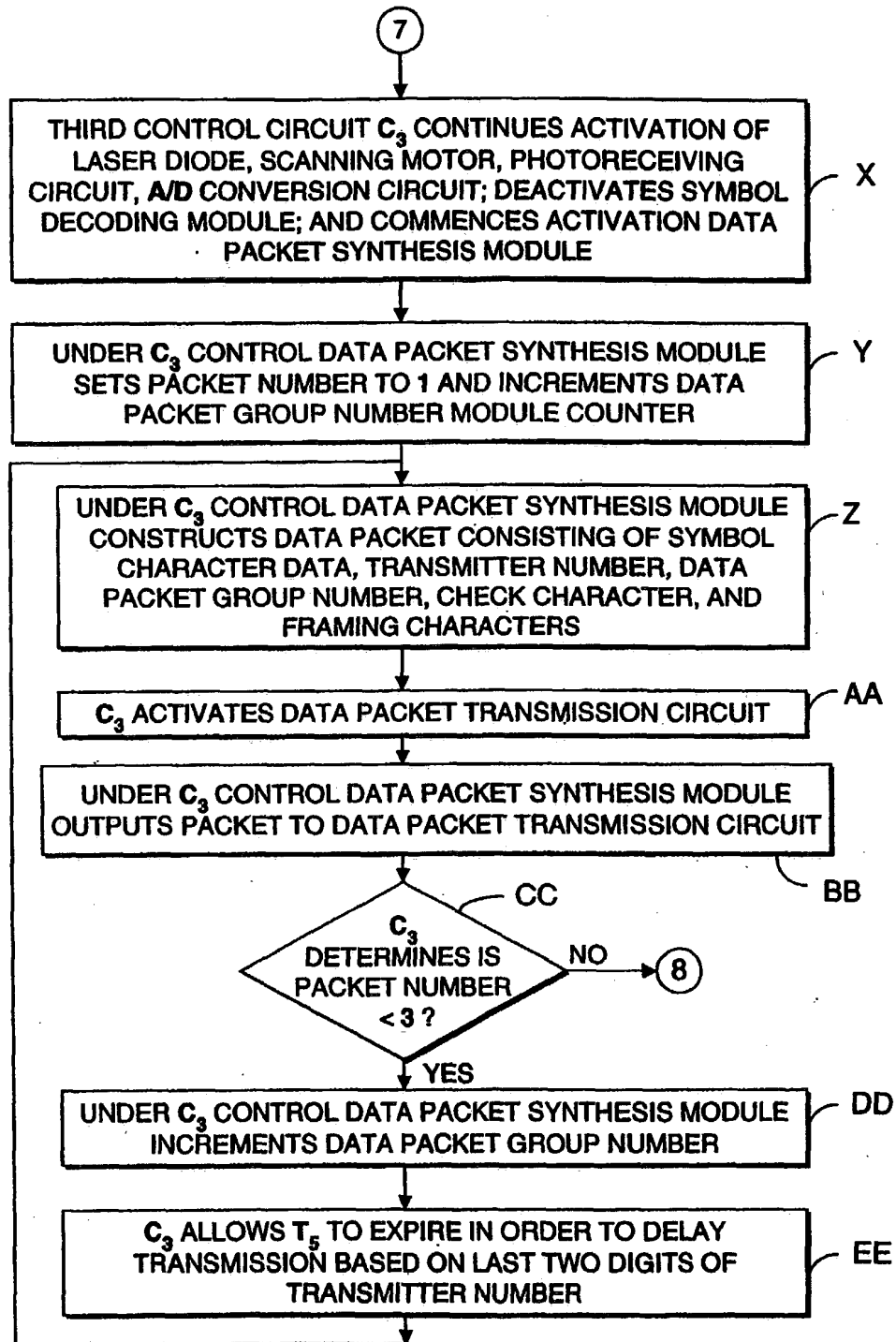


FIG. 30D

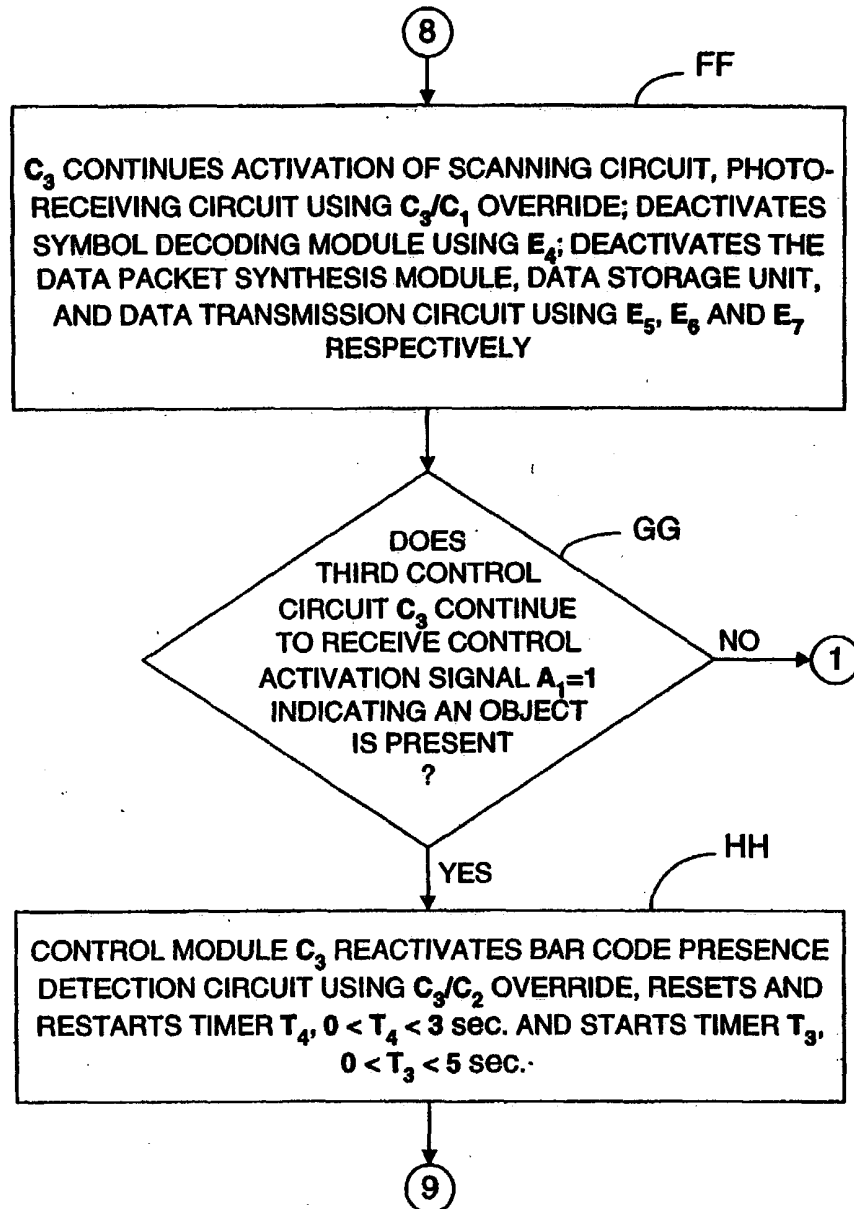


FIG. 30E

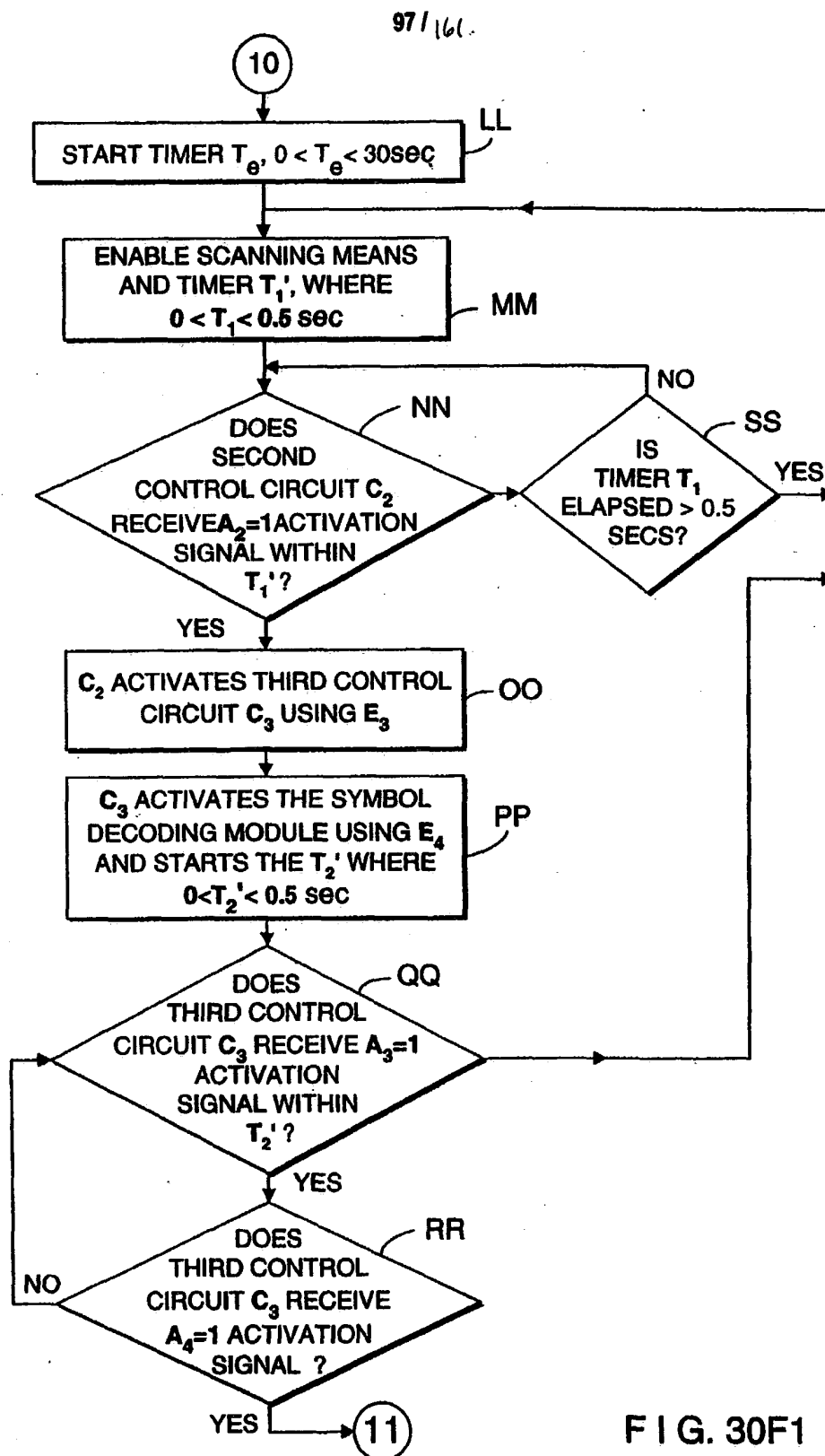


FIG. 30F1

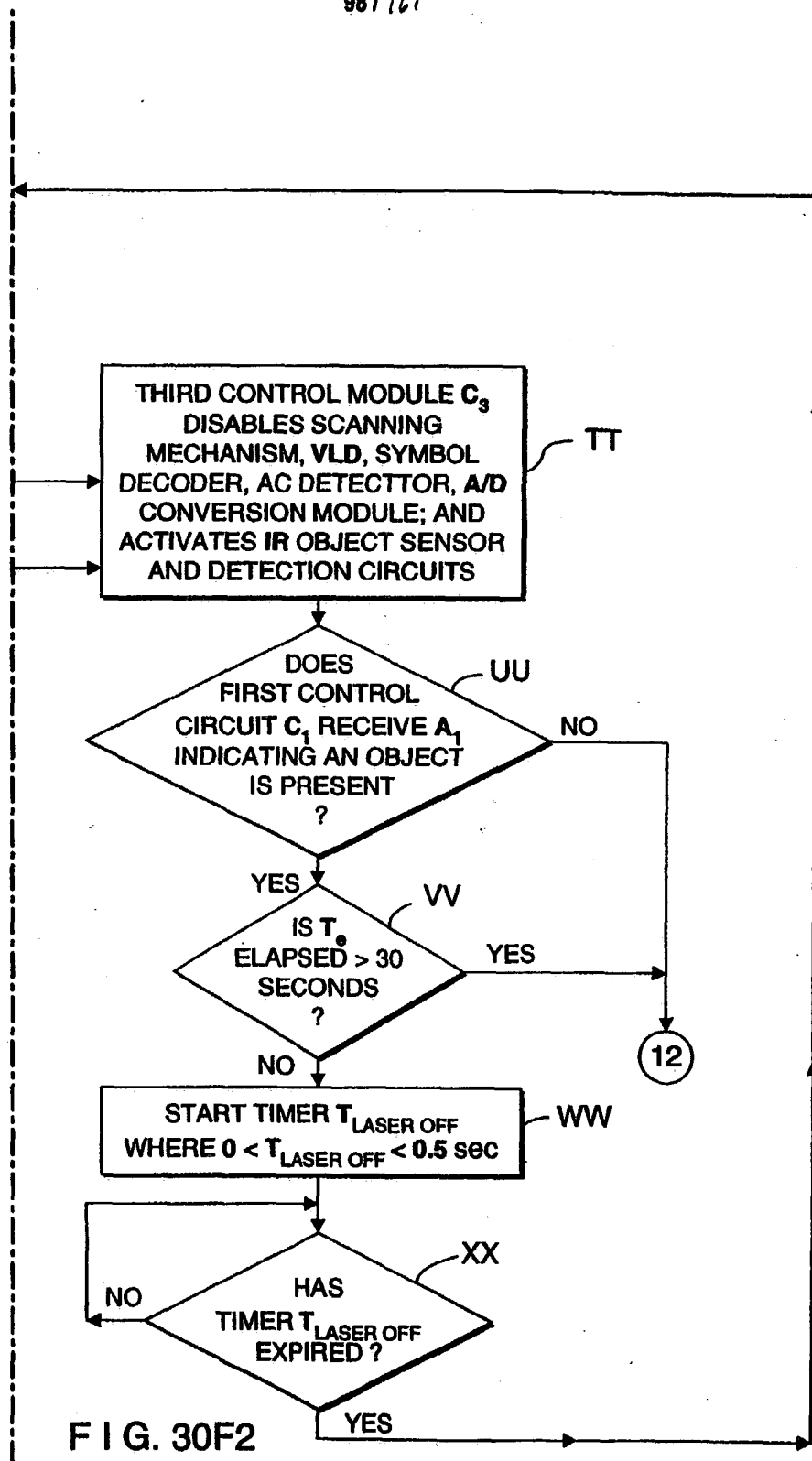


FIG. 30F2

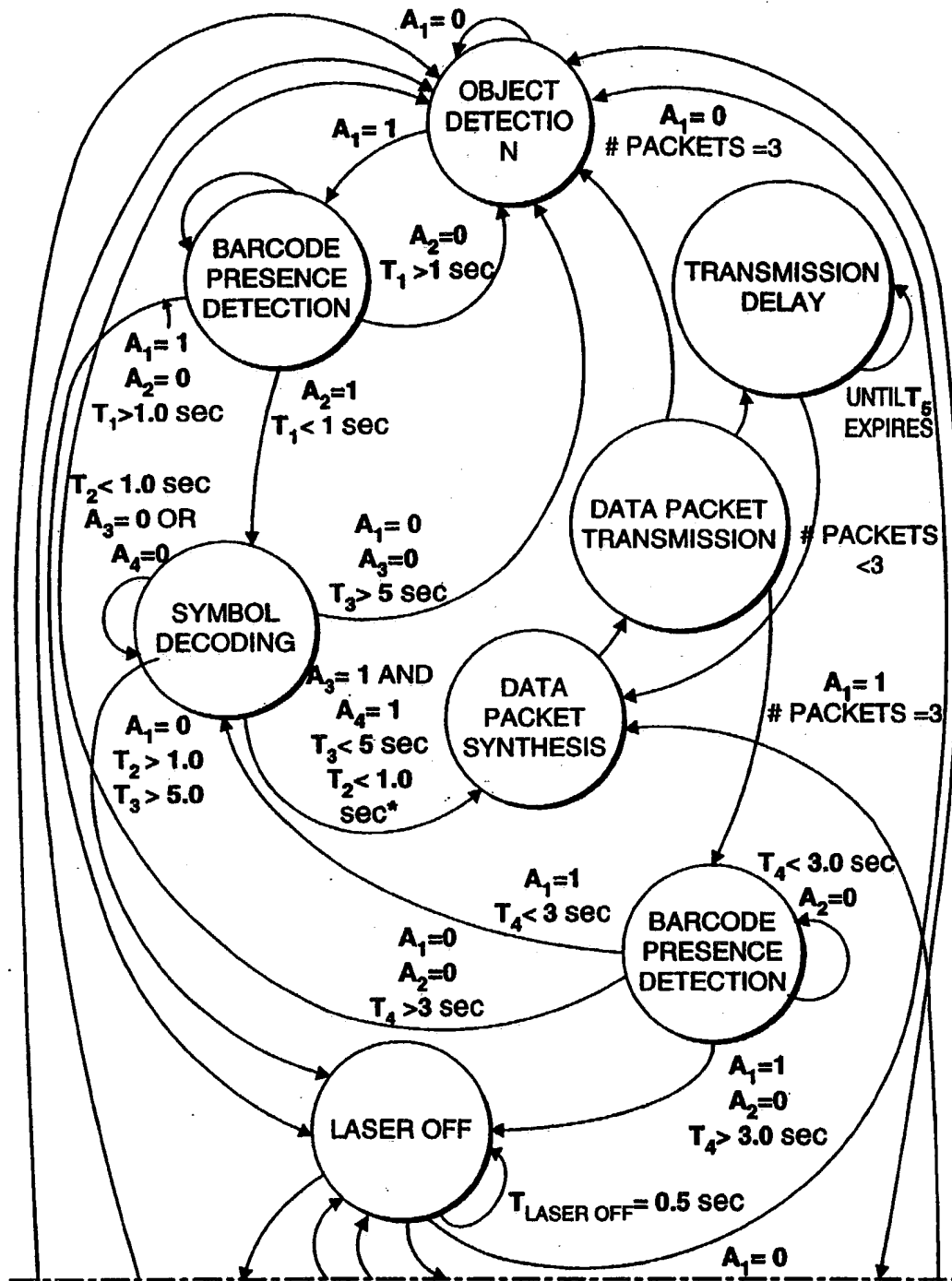


FIG. 31A

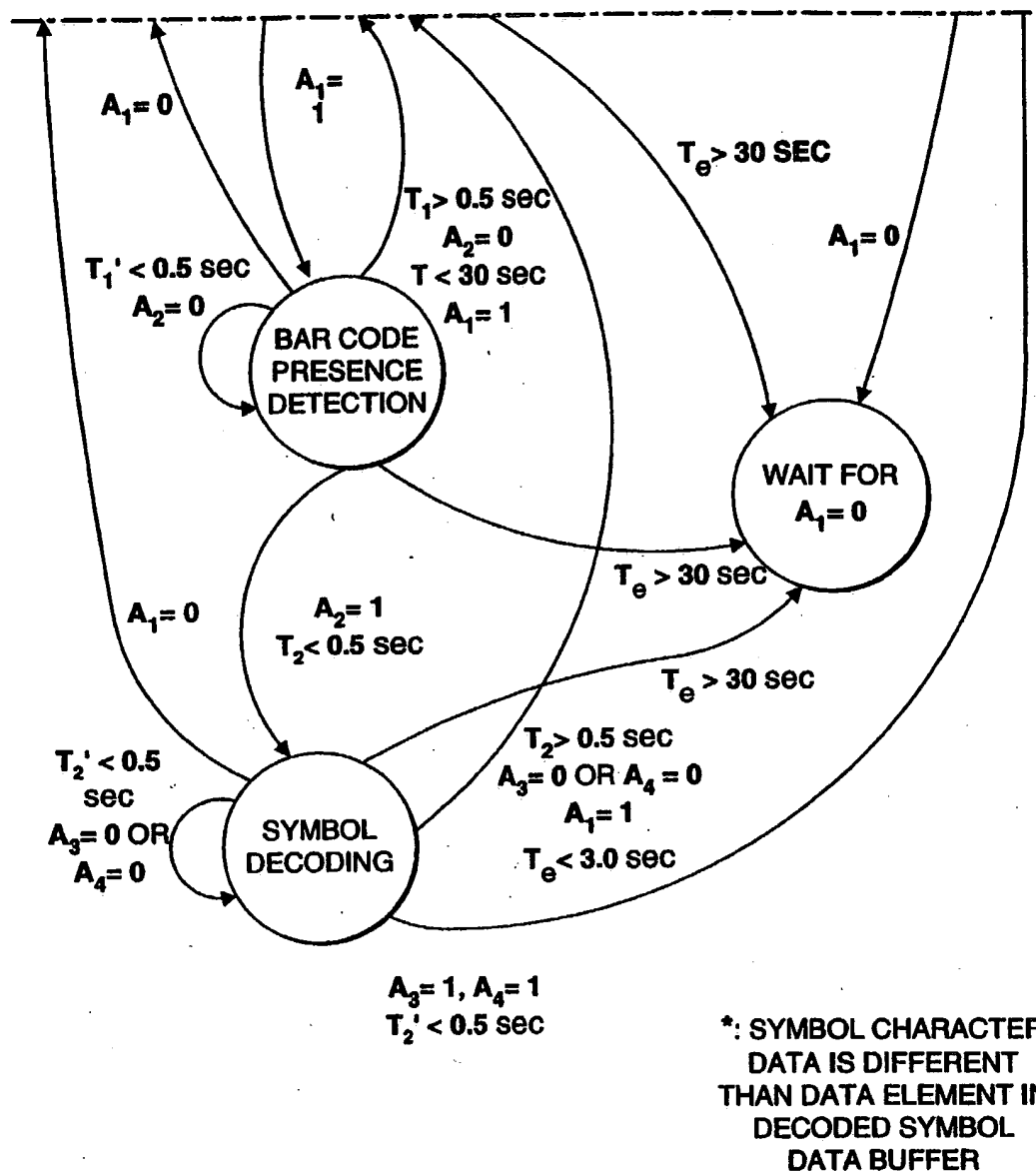


FIG. 31B

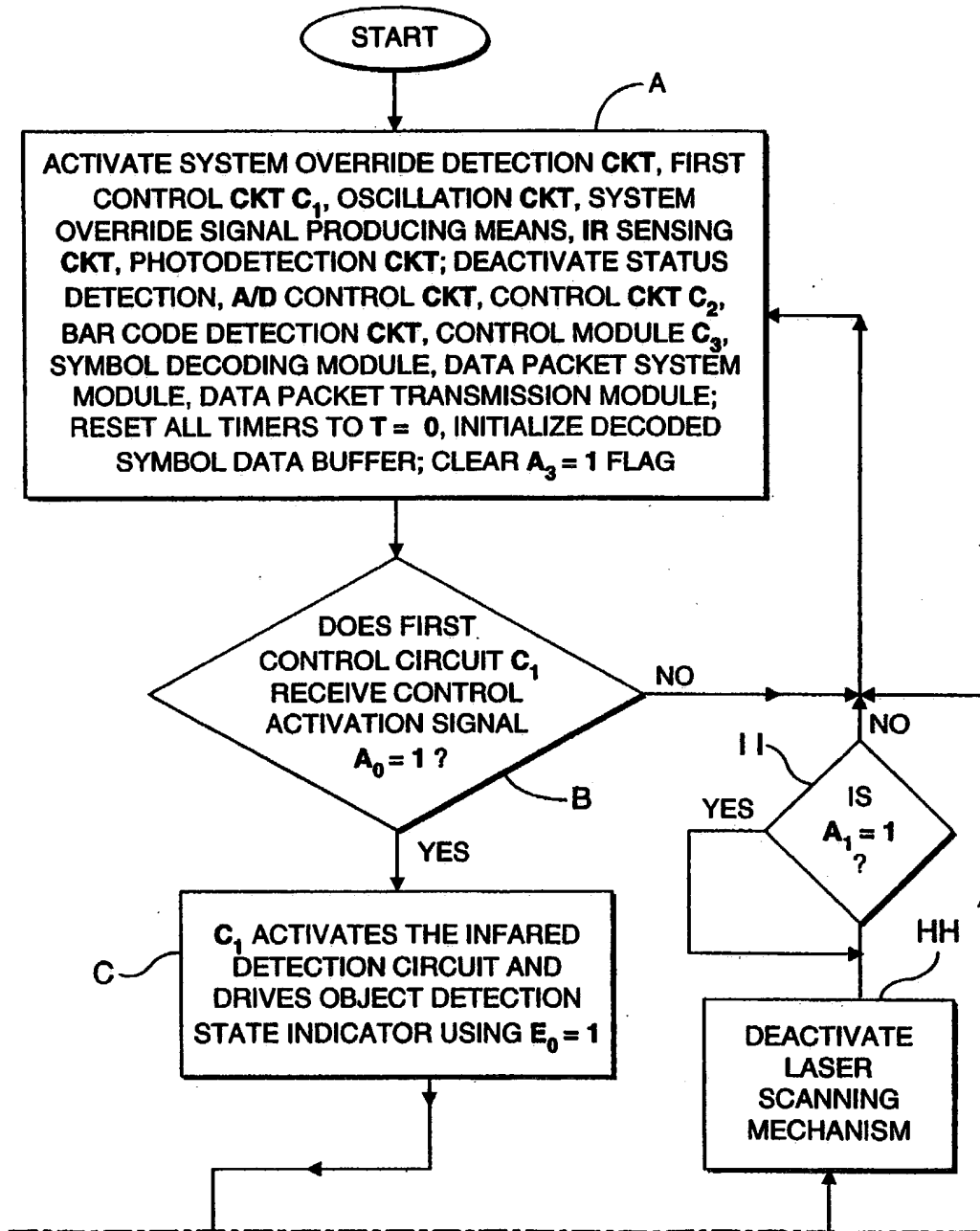


FIG. 32A1

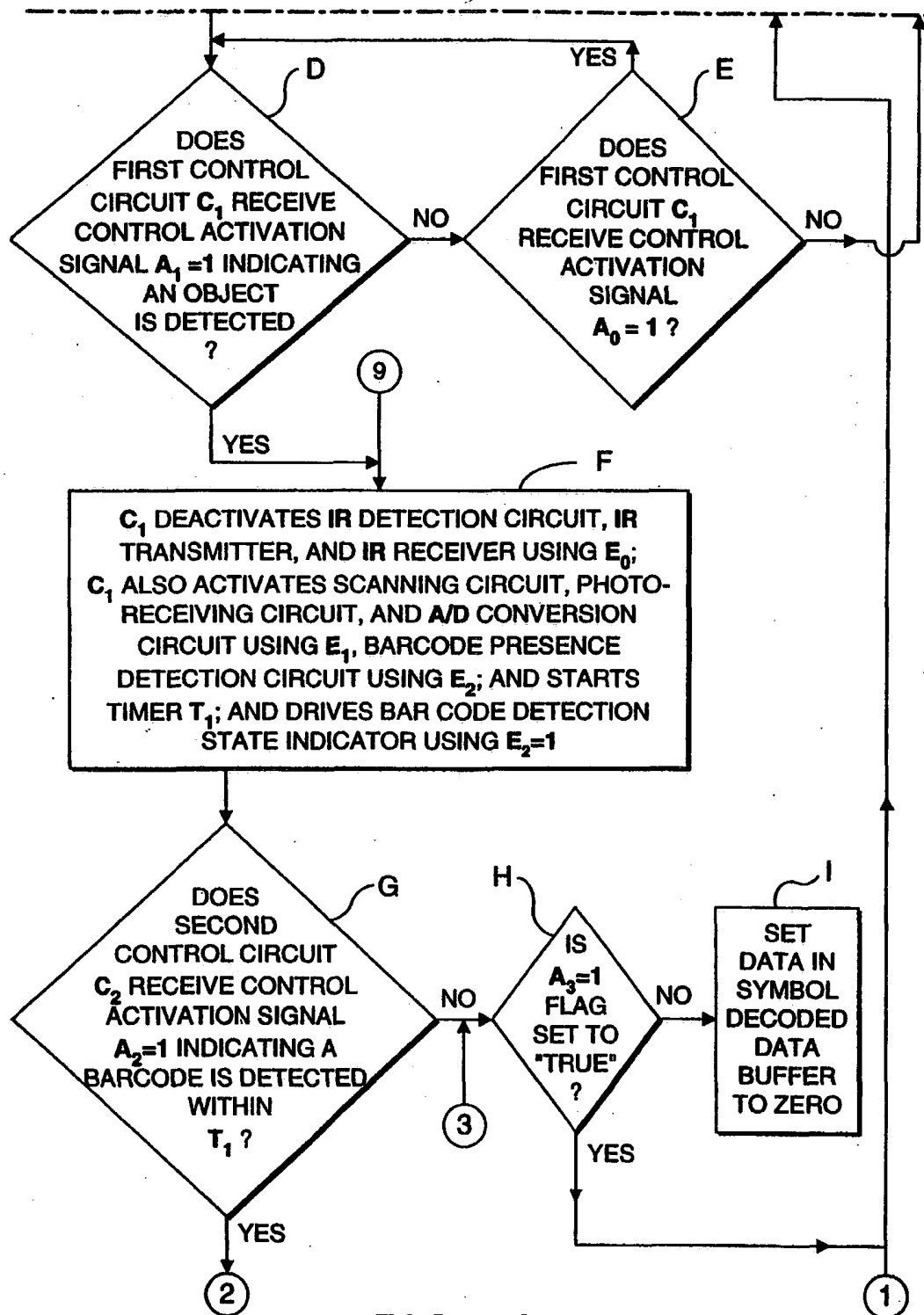


FIG. 32A2



FIG. 32B

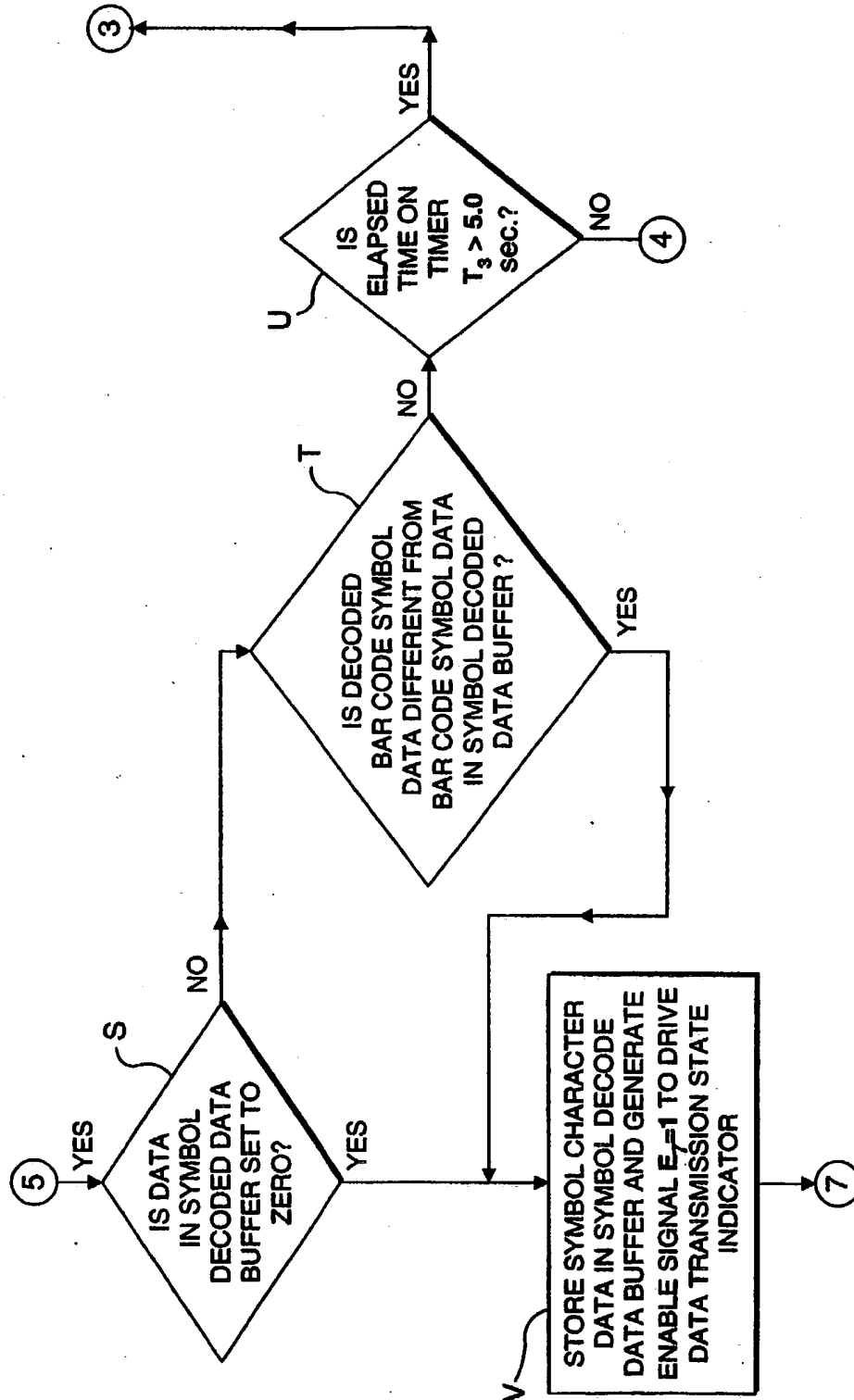


FIG. 32C

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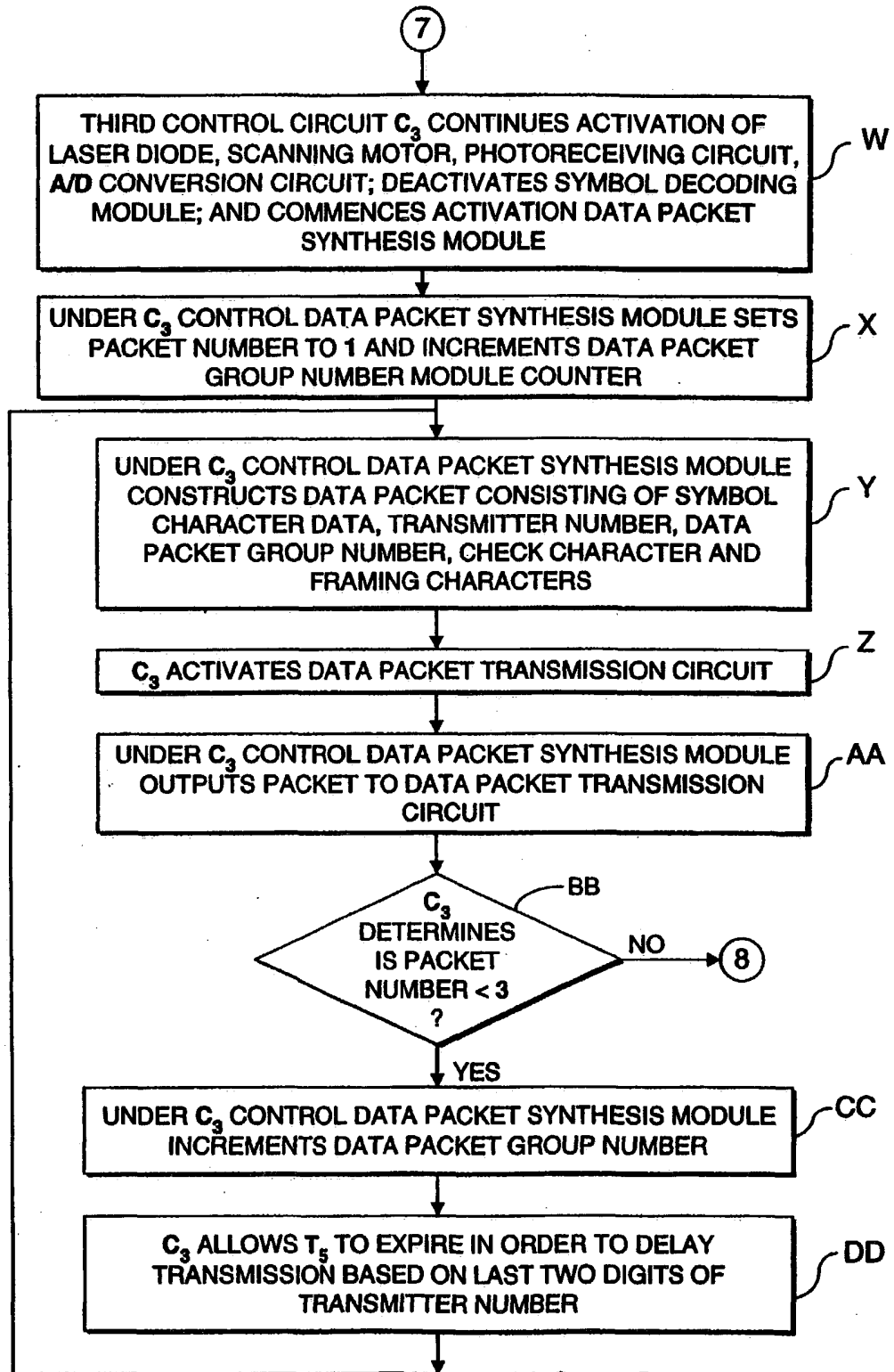


FIG. 32D

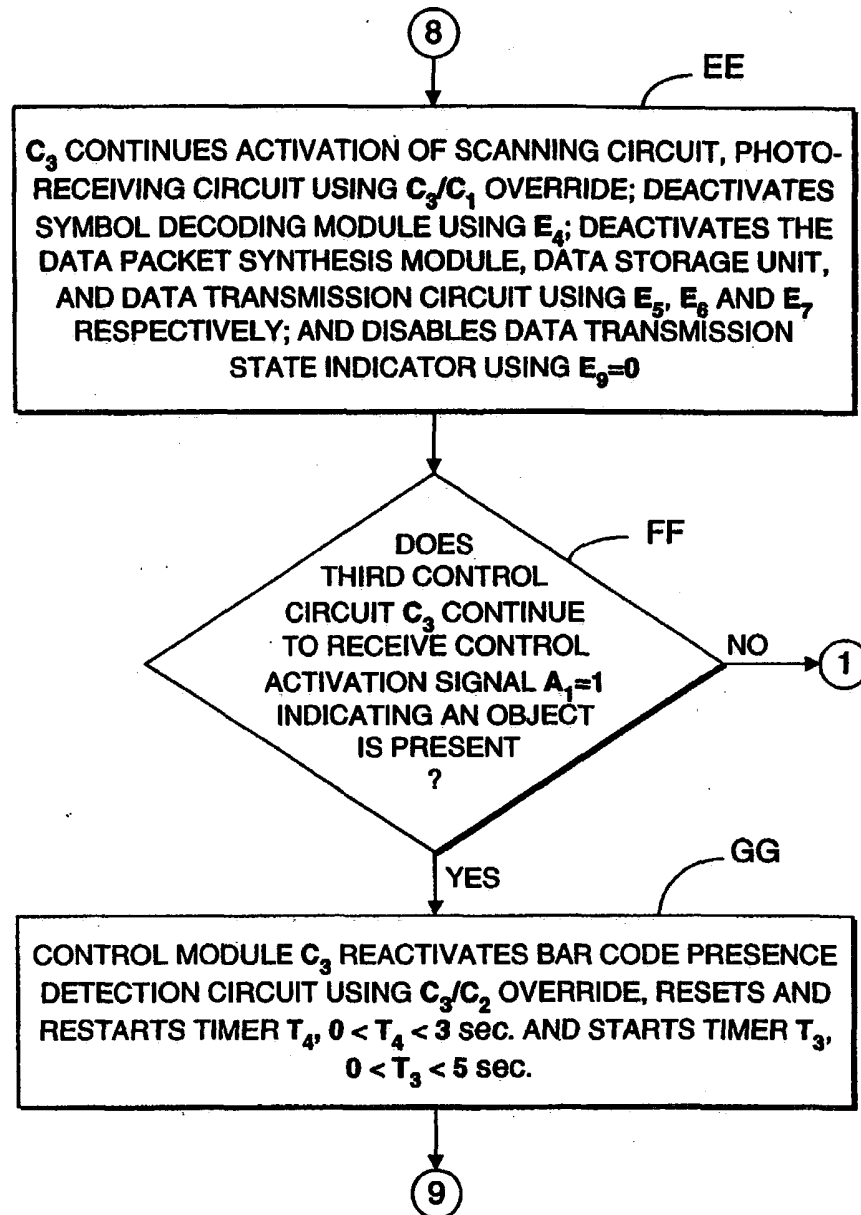


FIG. 32E

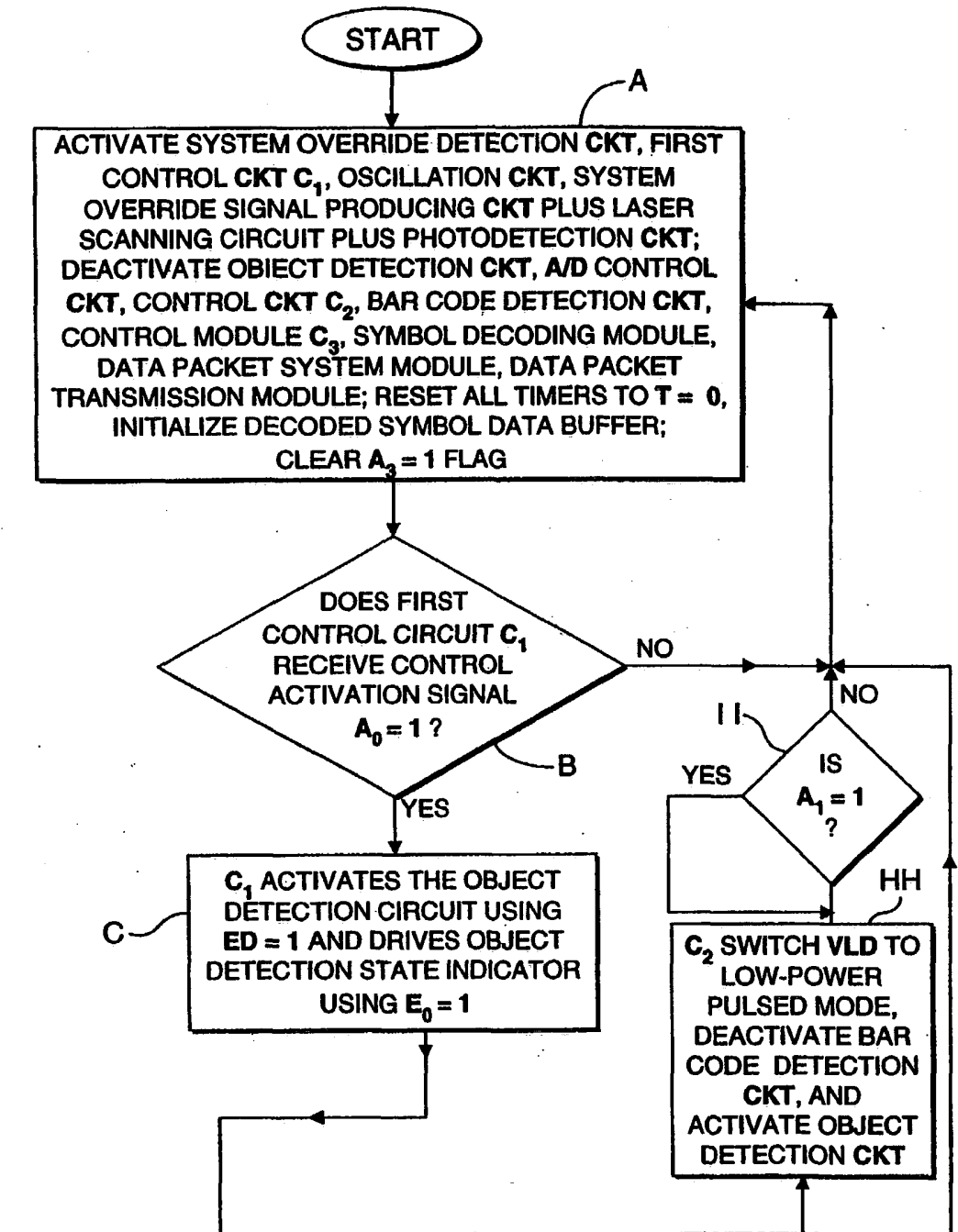


FIG. 33A1

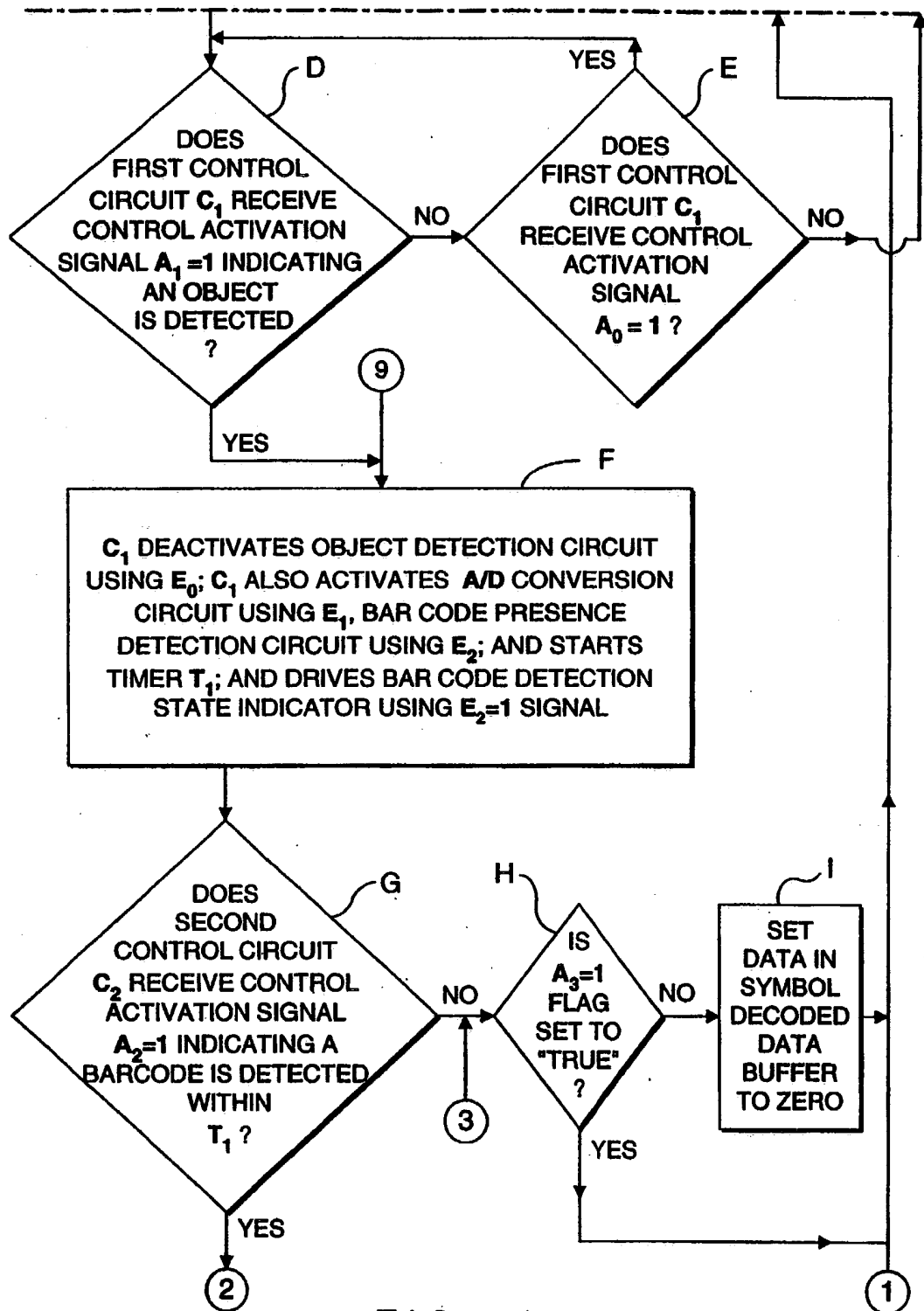
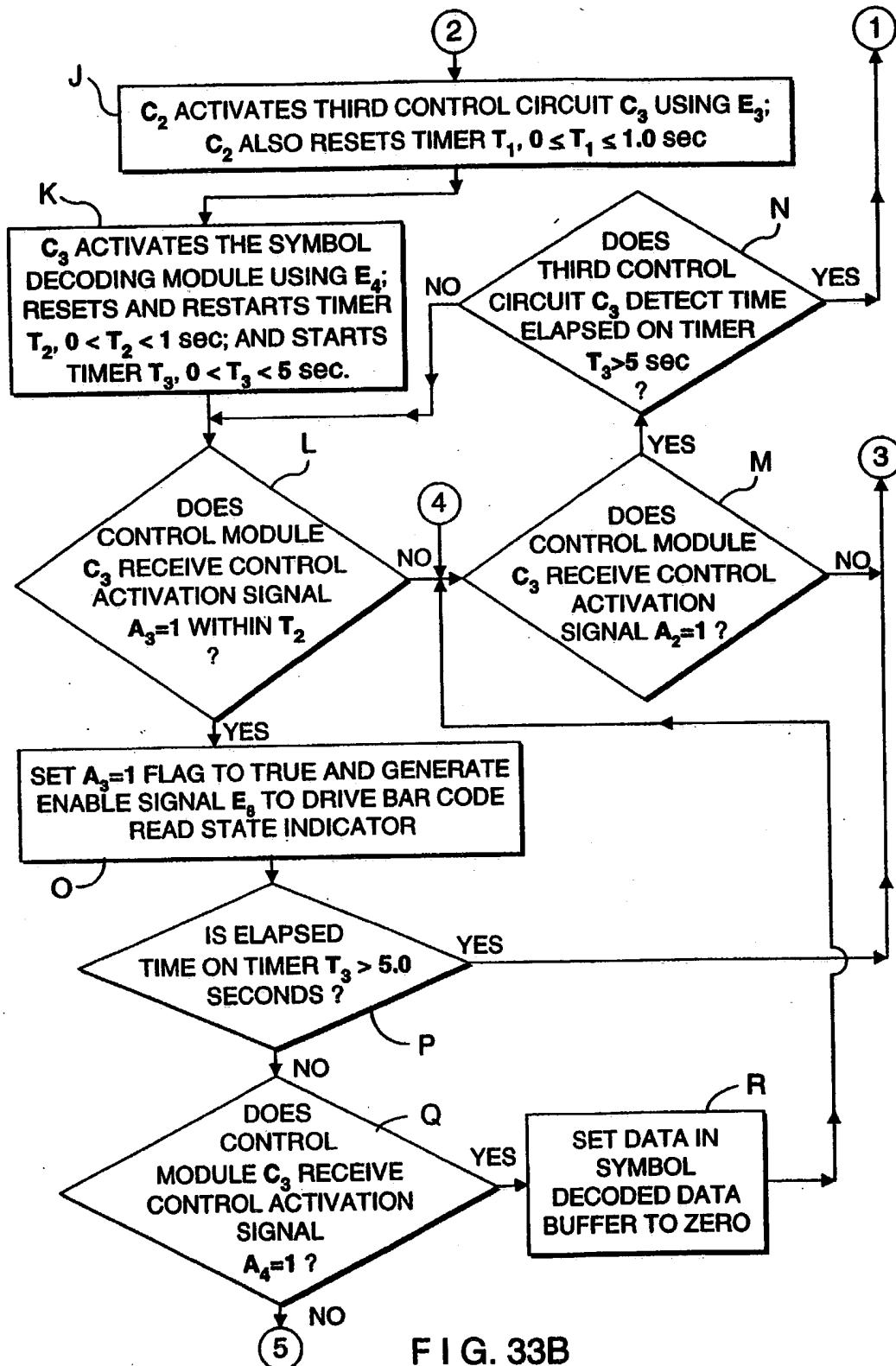


FIG. 33A2



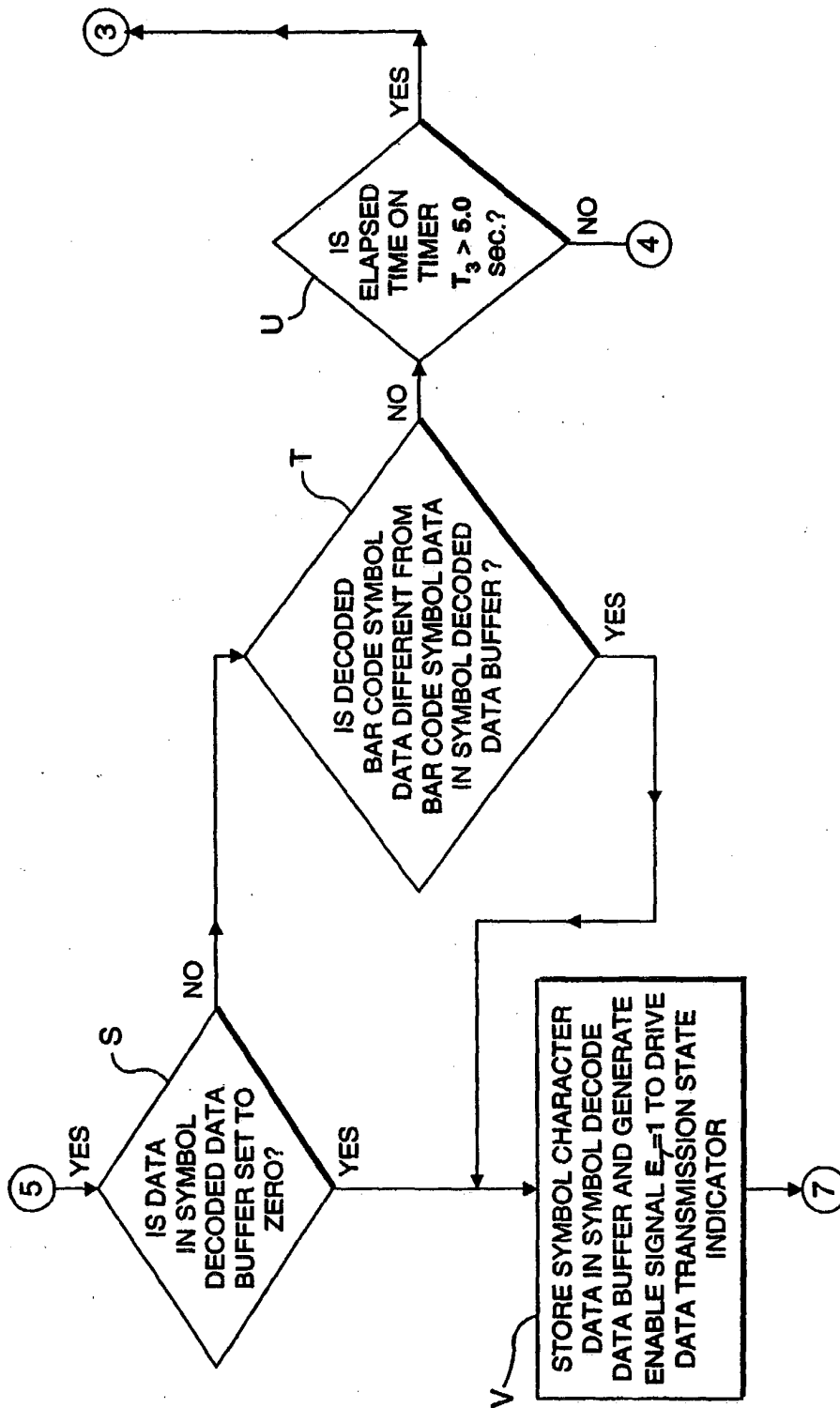


FIG. 33C

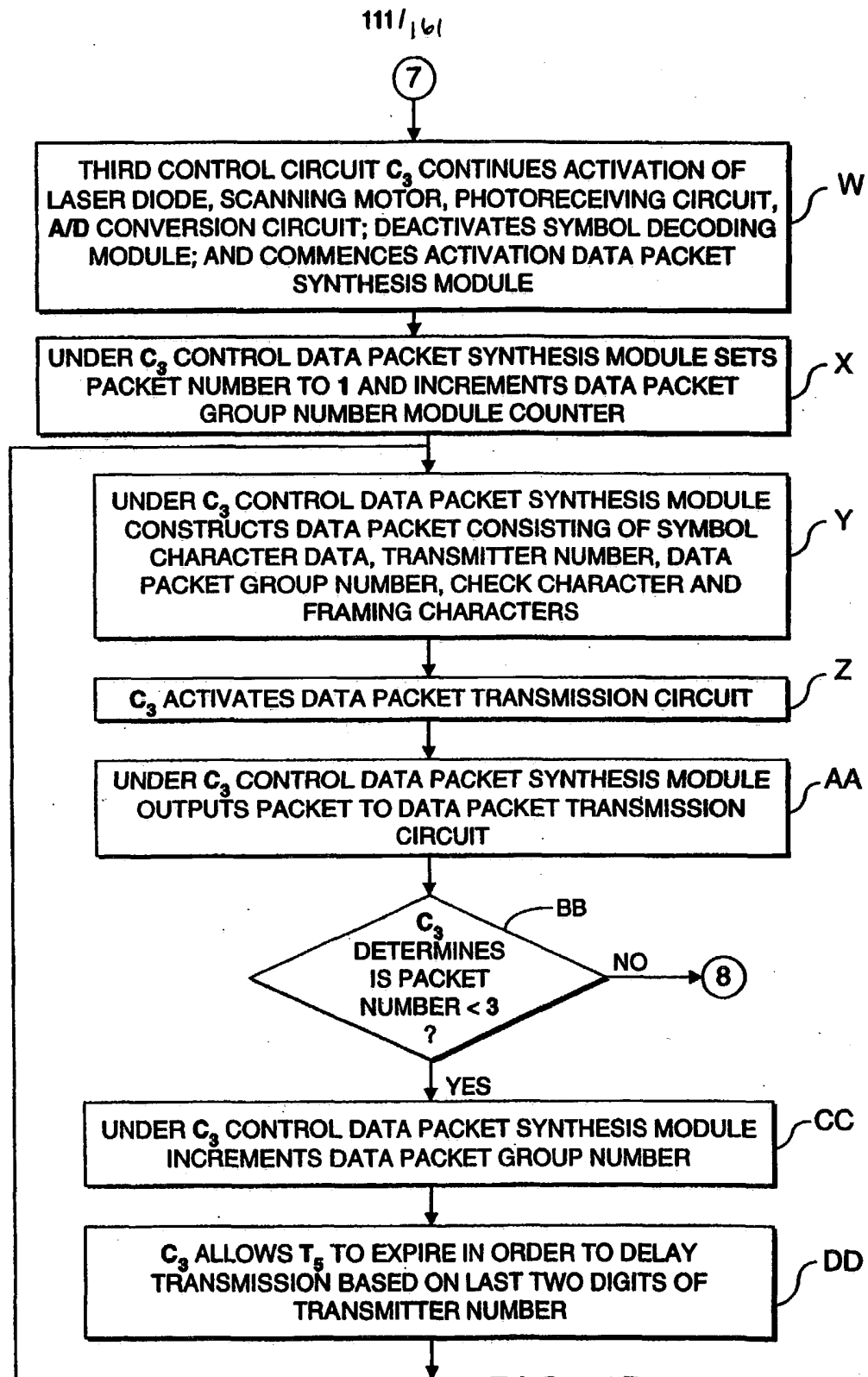


FIG. 33D

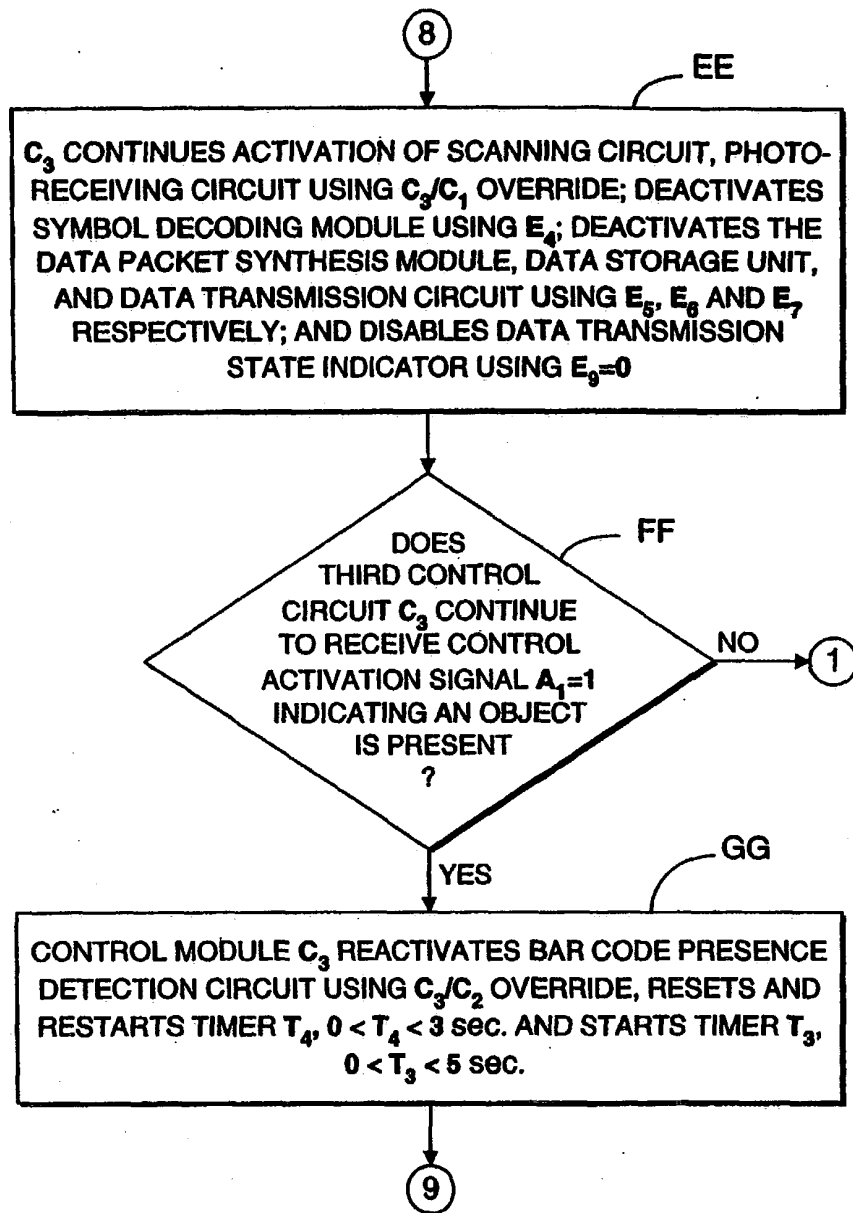


FIG. 33E

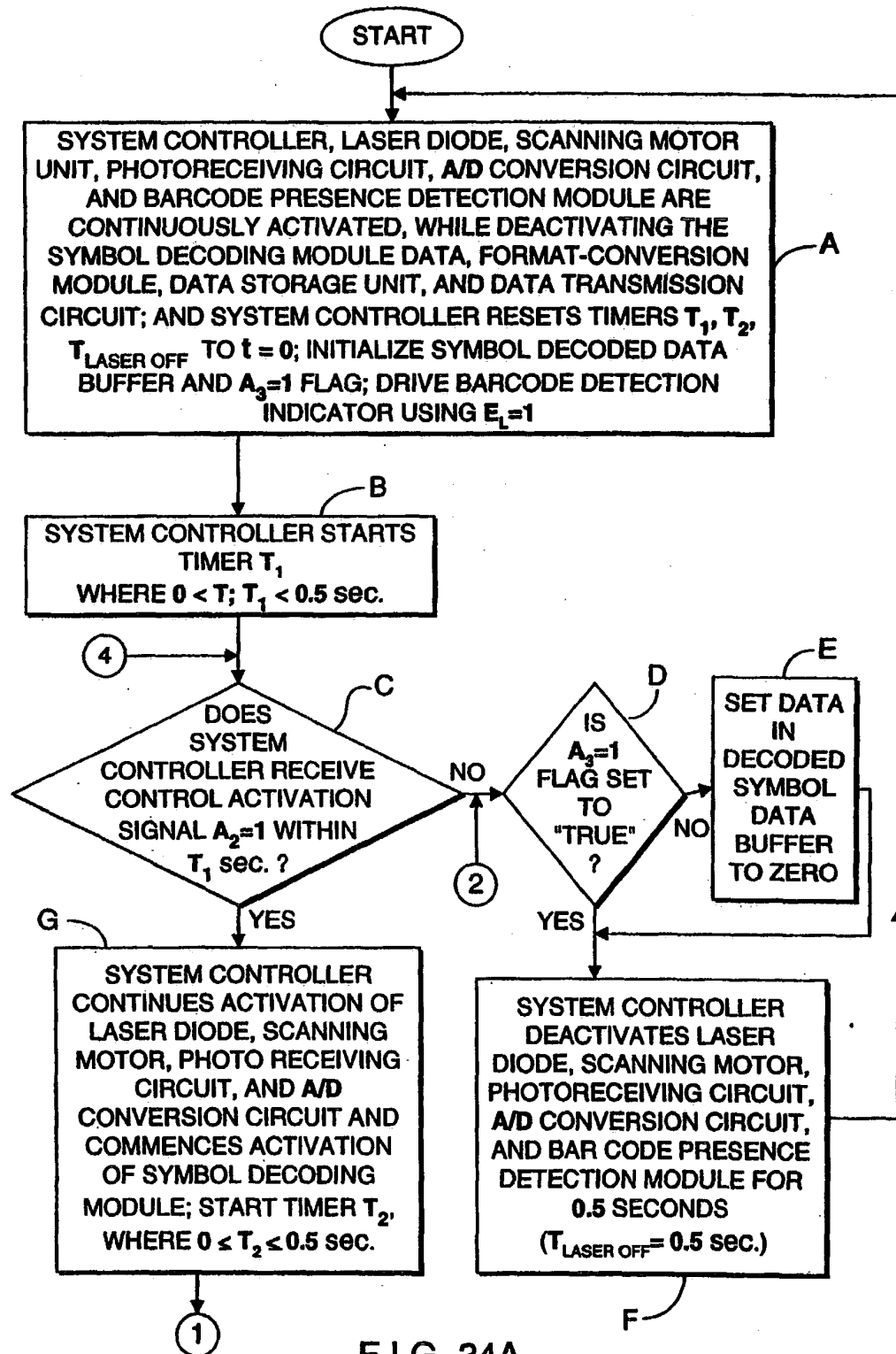


FIG. 34A

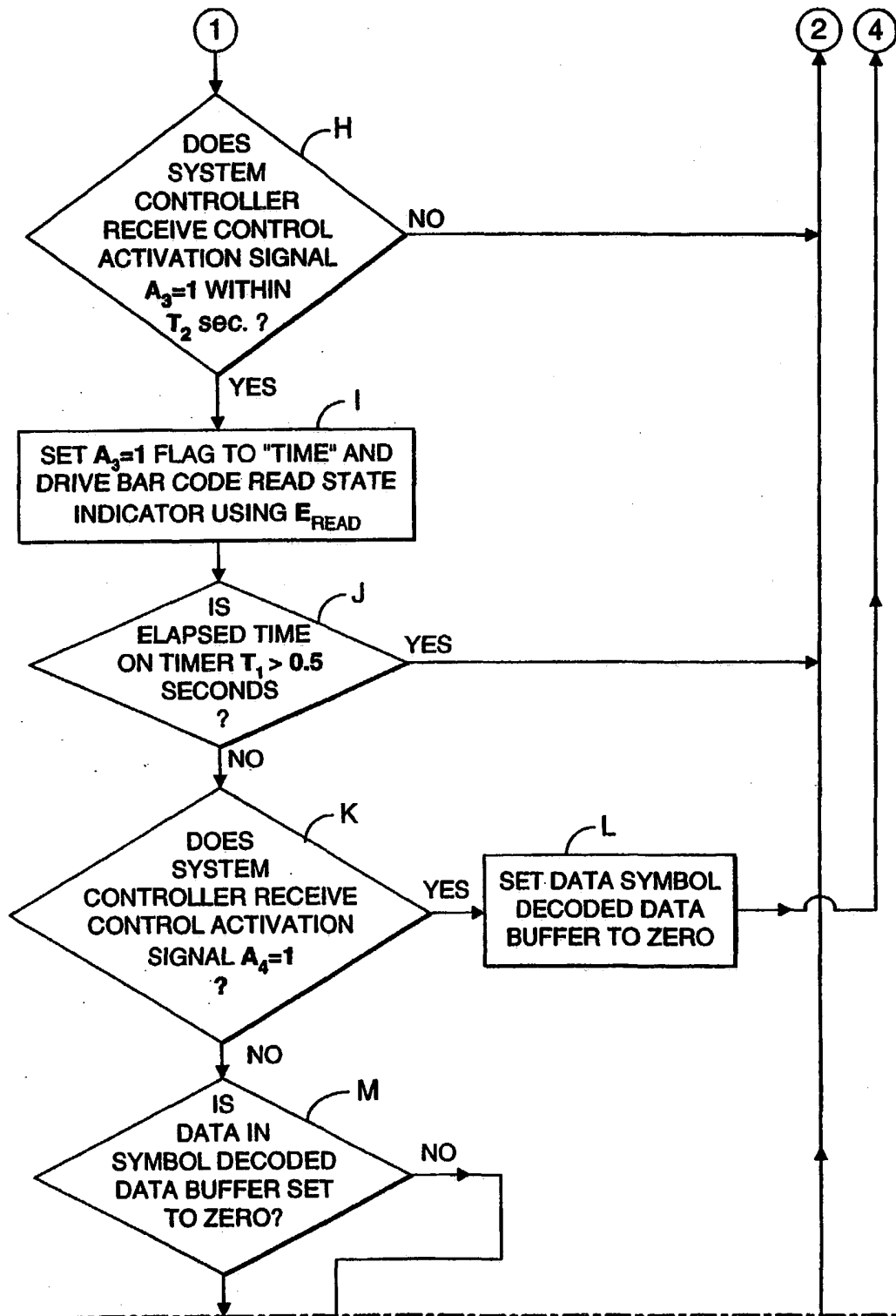


FIG. 34B1

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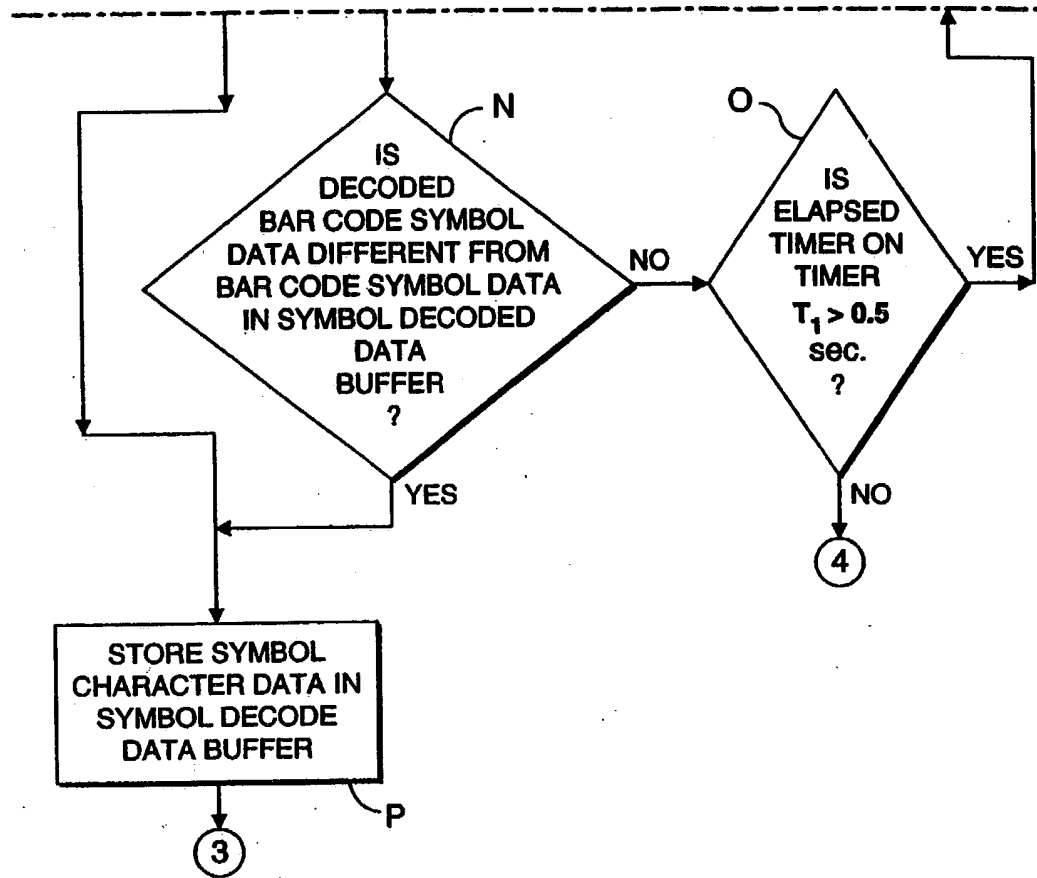


FIG. 34B2

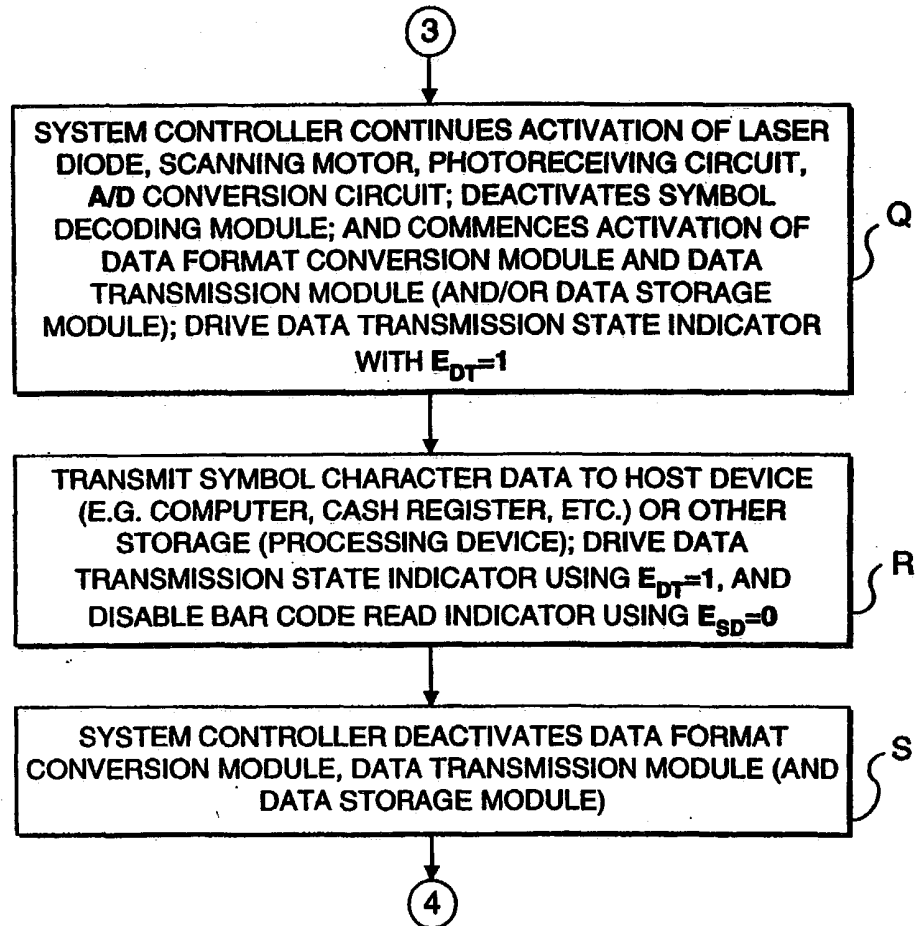


FIG. 34C

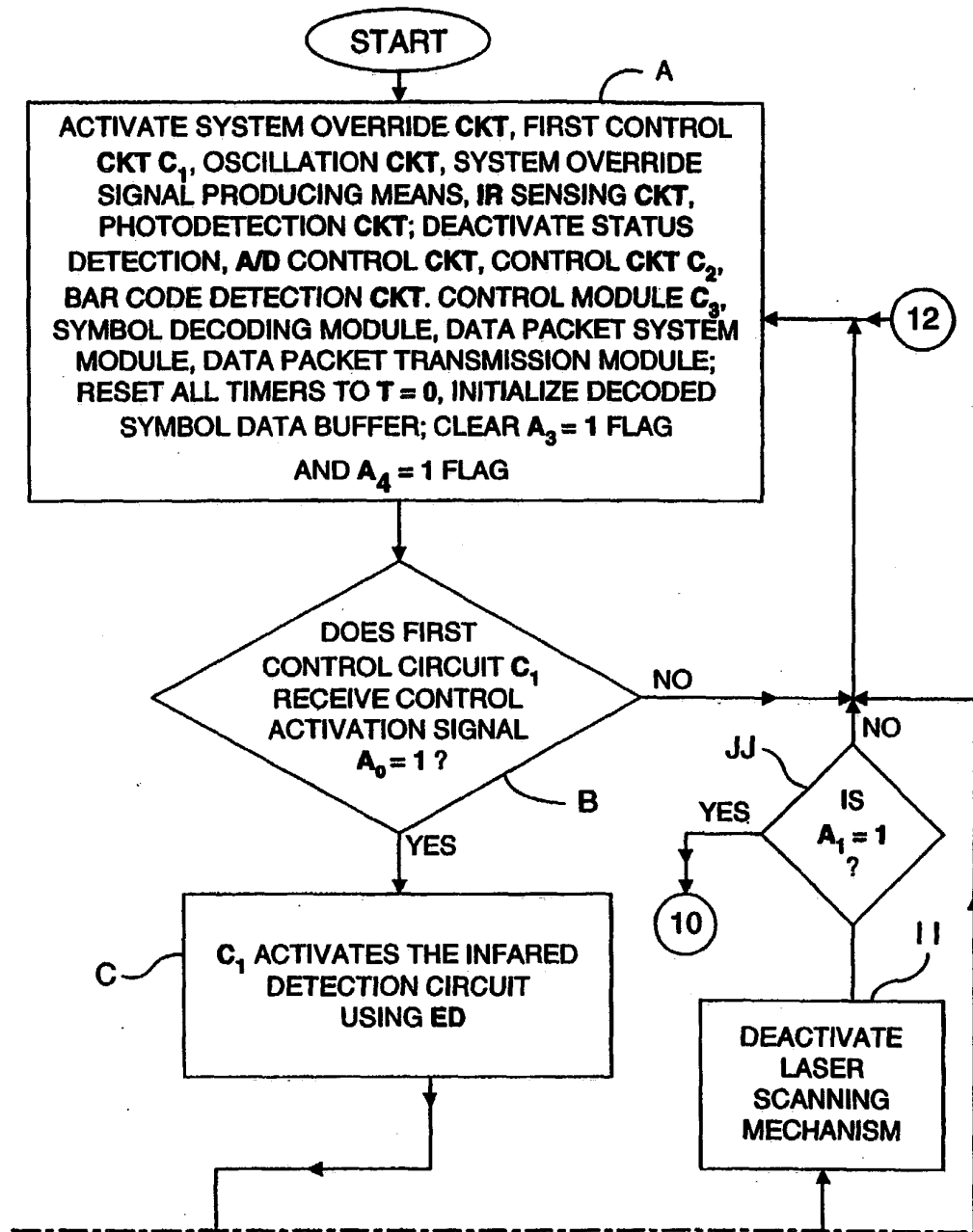


FIG. 35A1

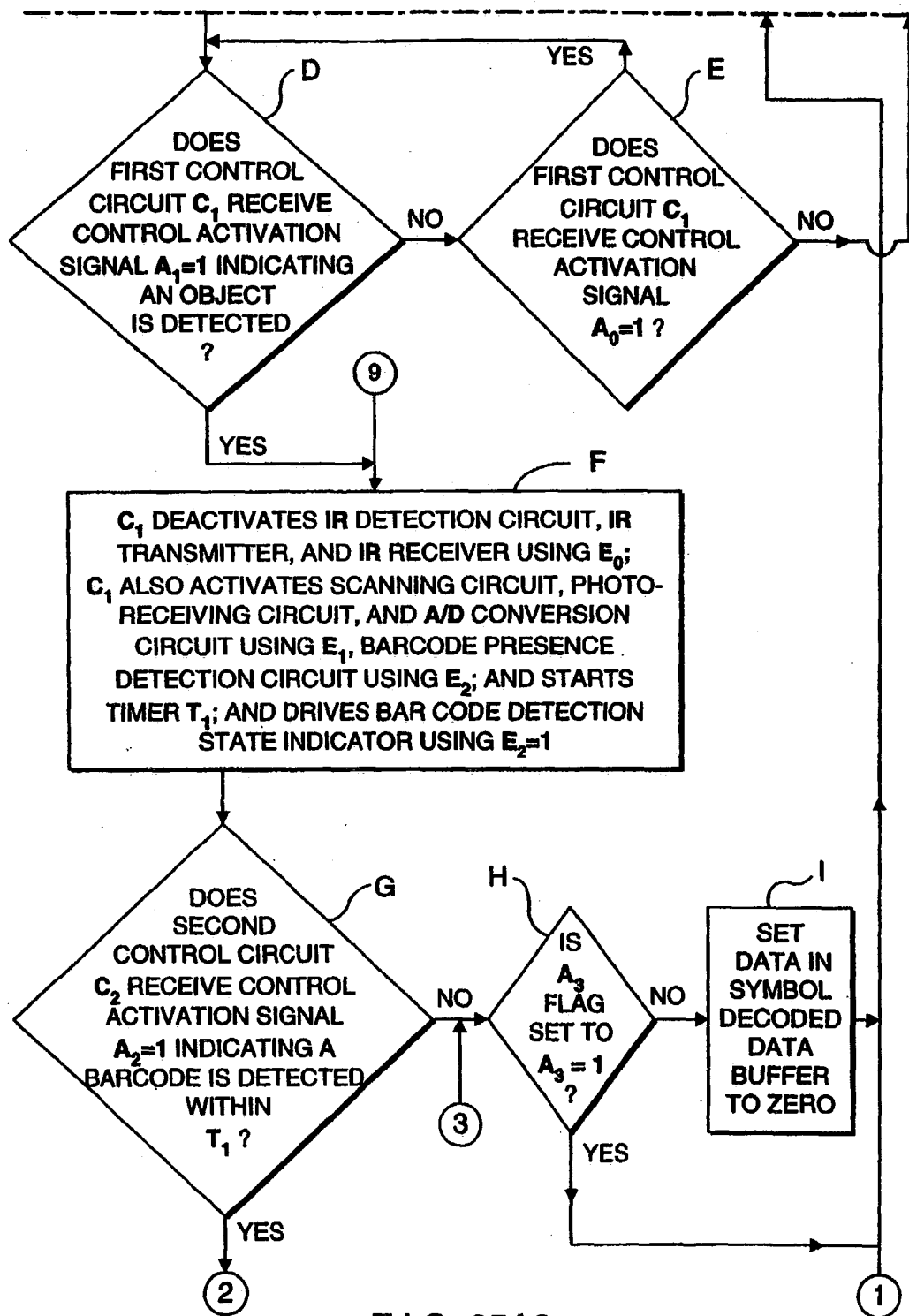


FIG. 35A2

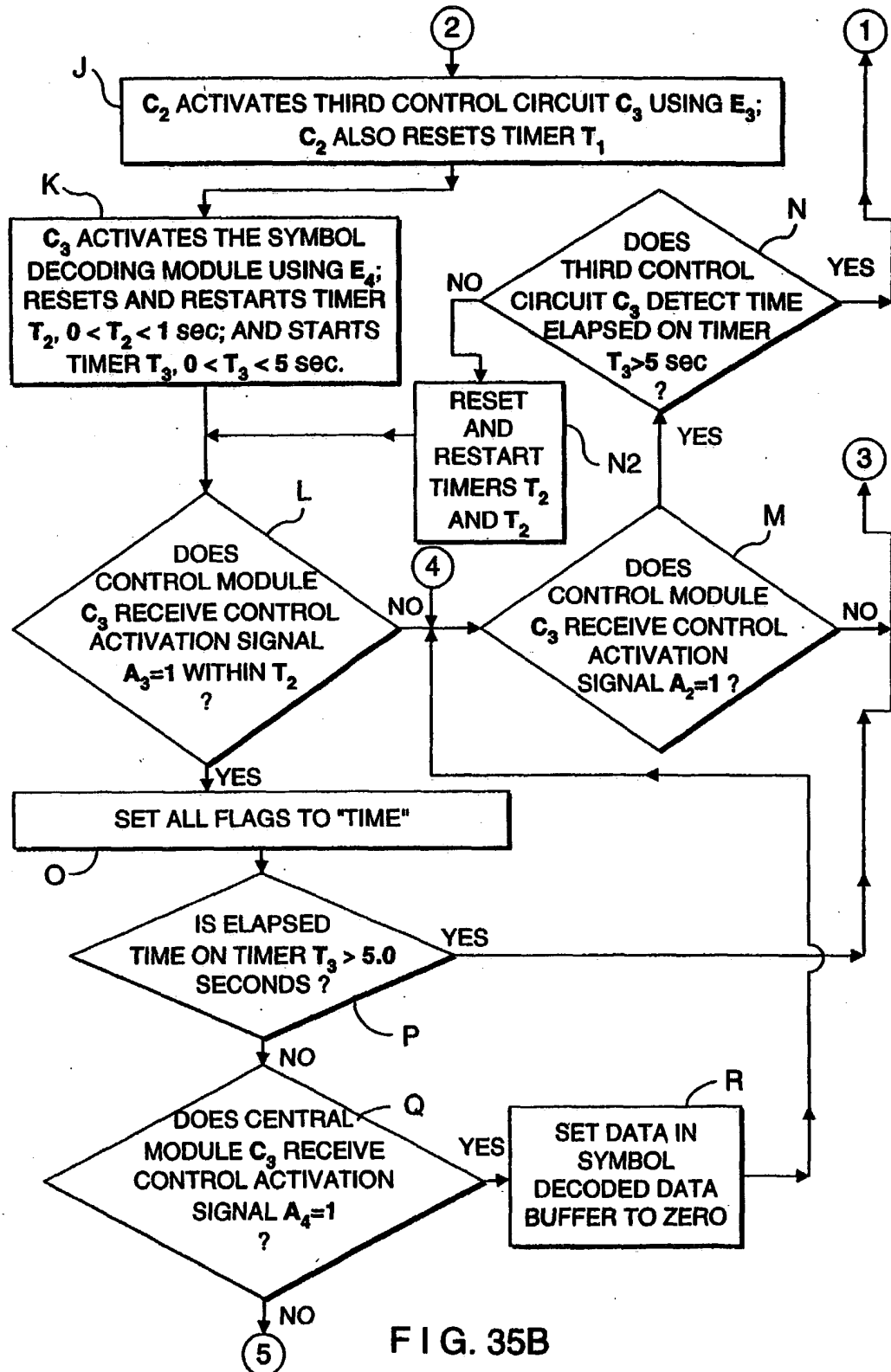


FIG. 35B

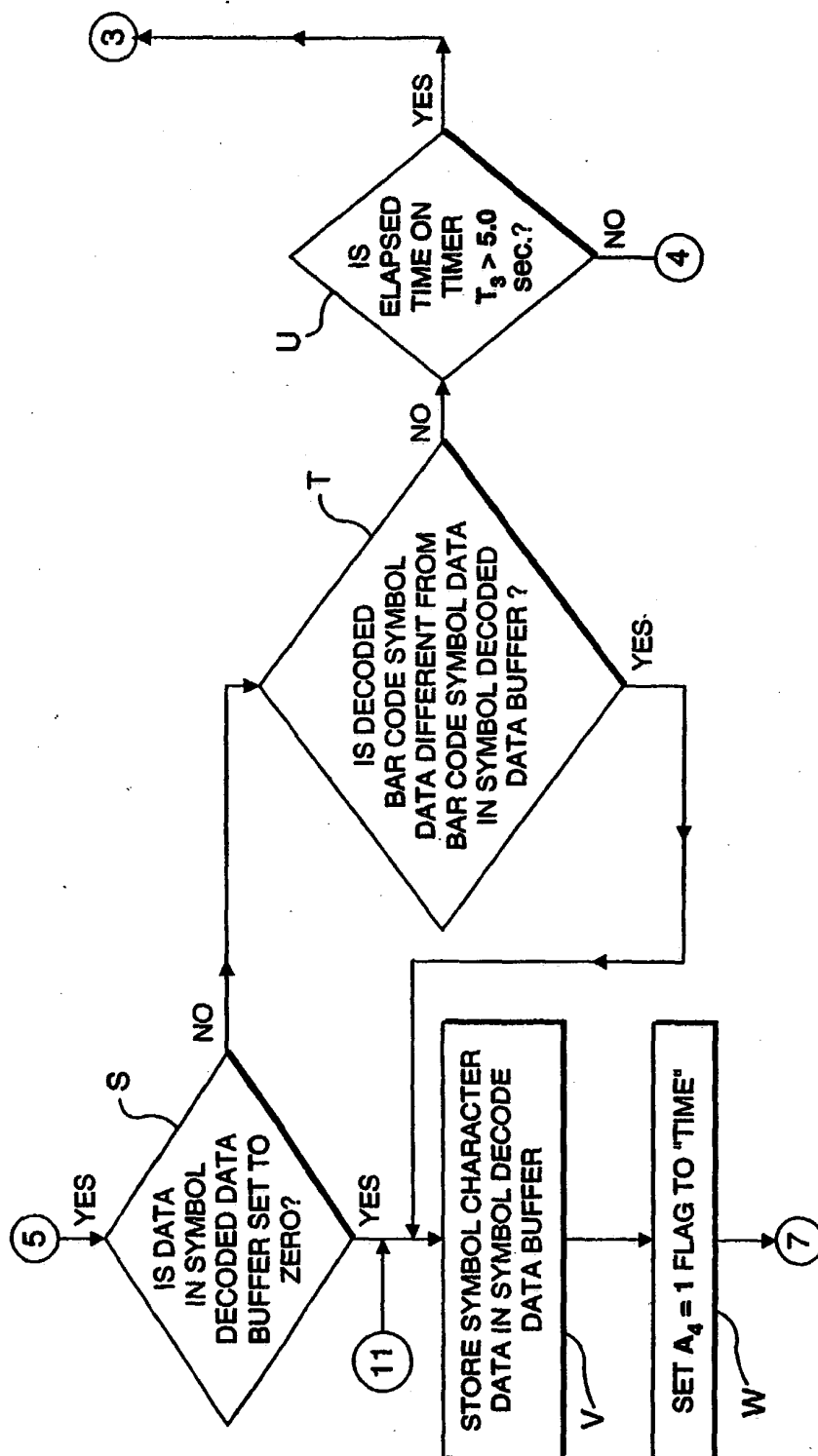


FIG. 35C

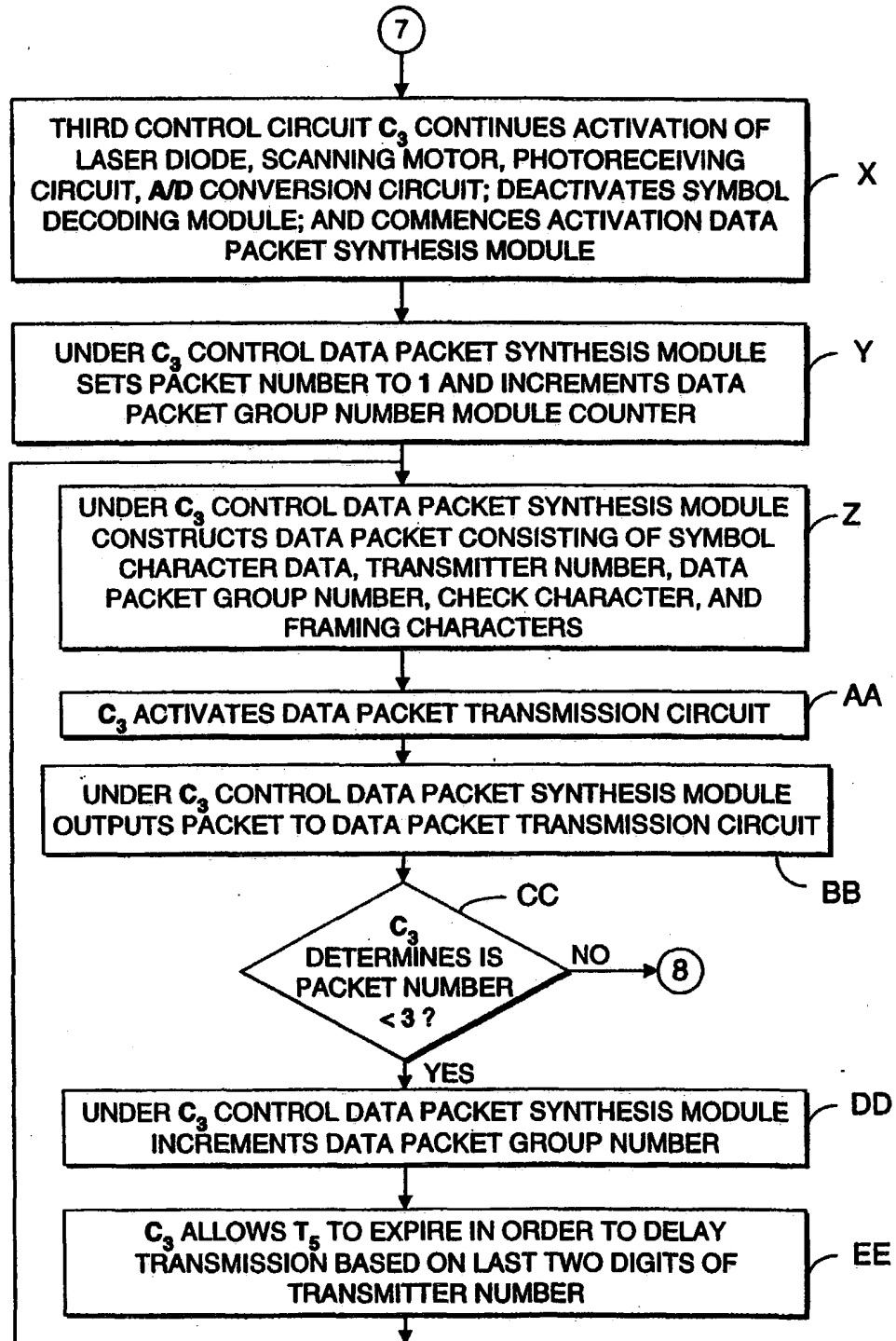


FIG. 35D

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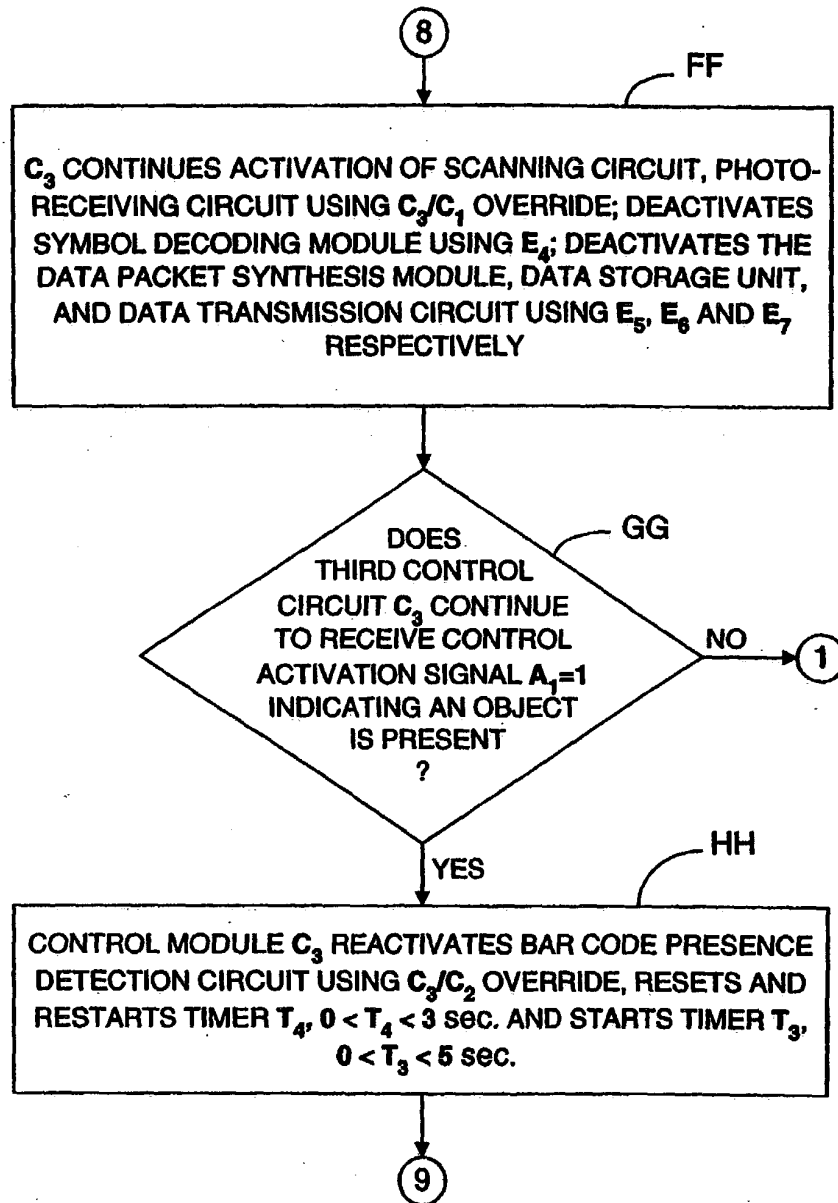


FIG. 35E

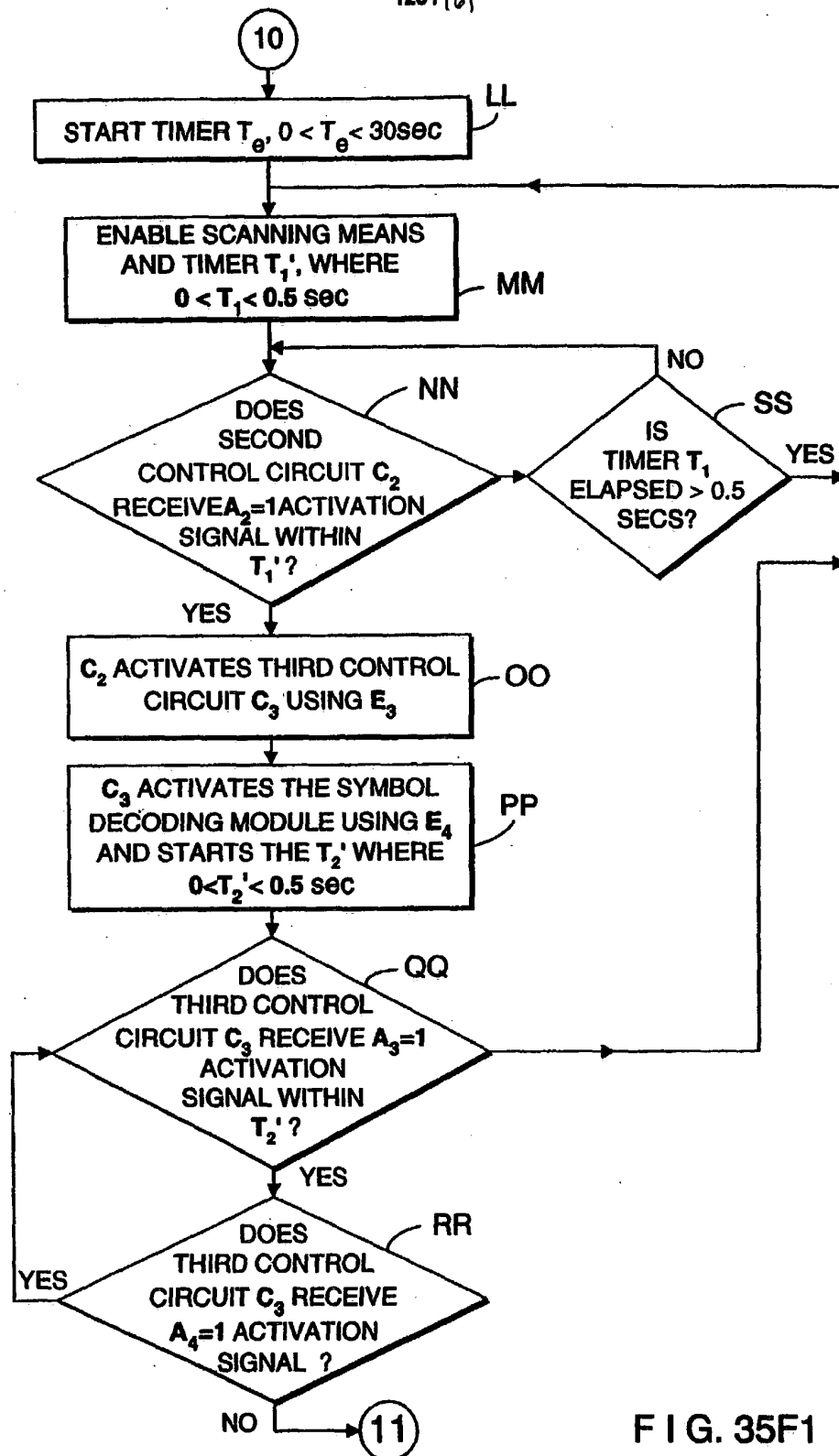


FIG. 35F1

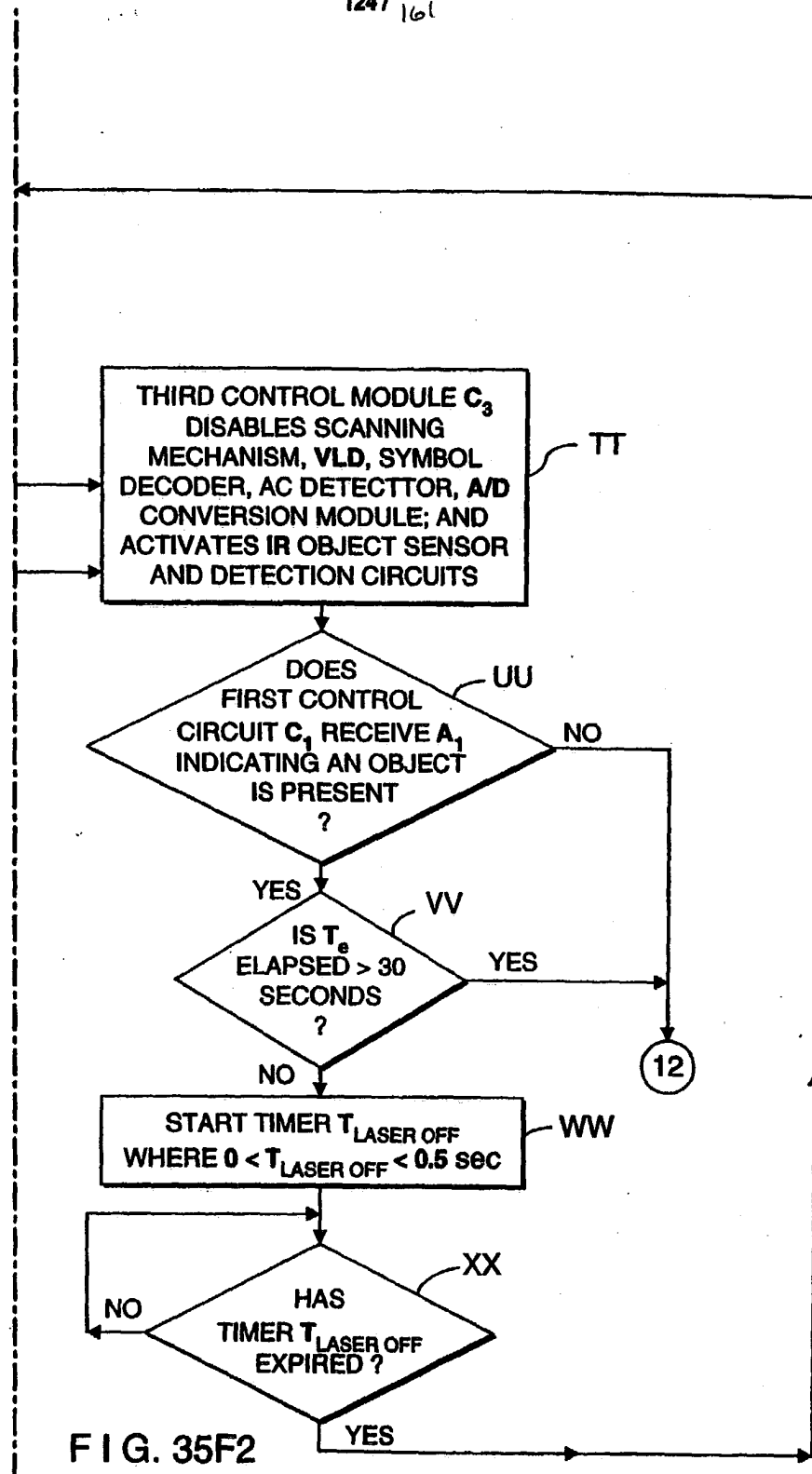
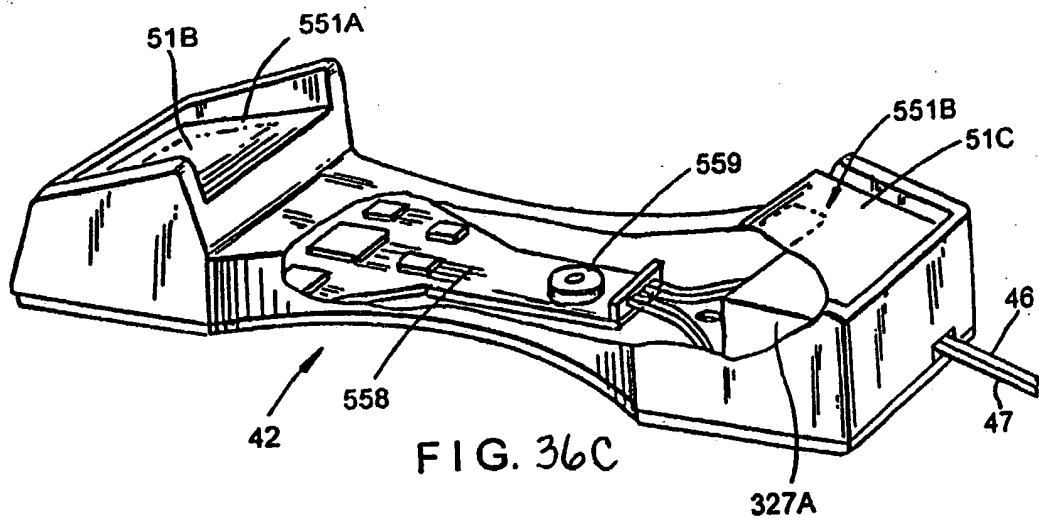
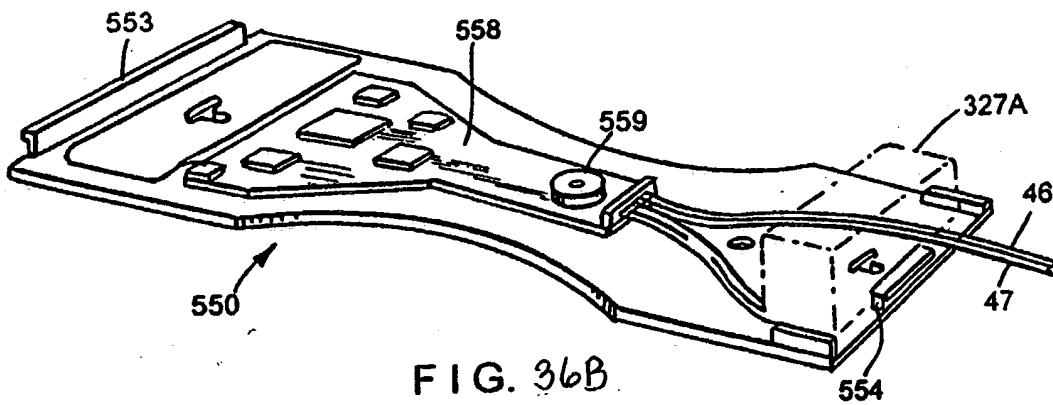
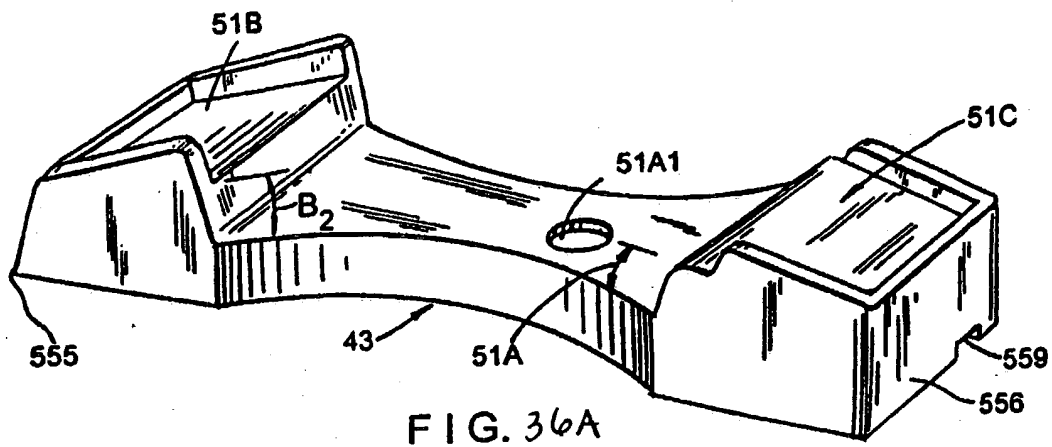


FIG. 35F2

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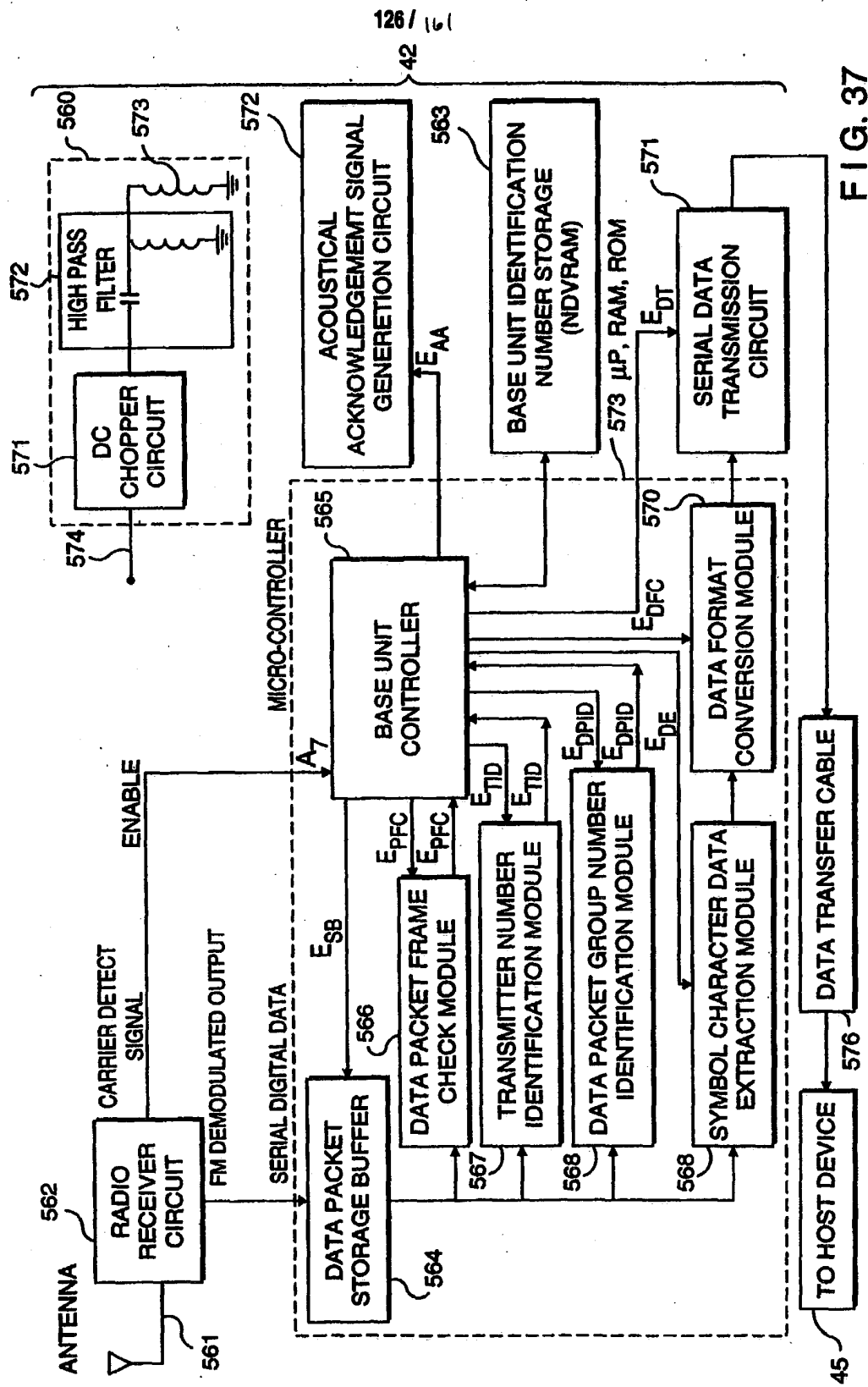


FIG. 37

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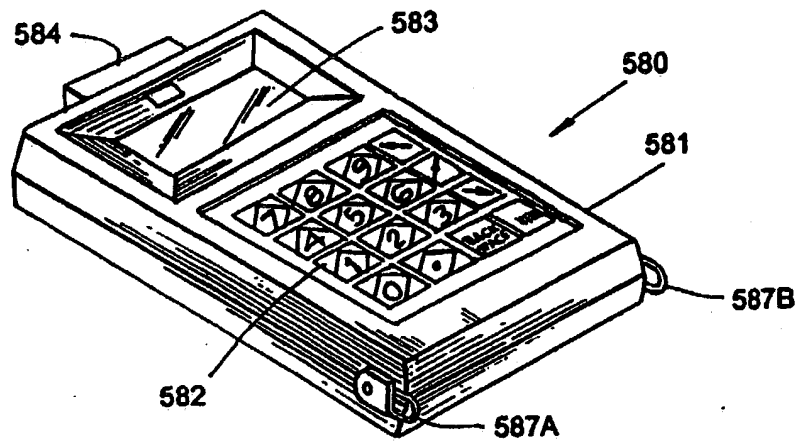


FIG. 38A

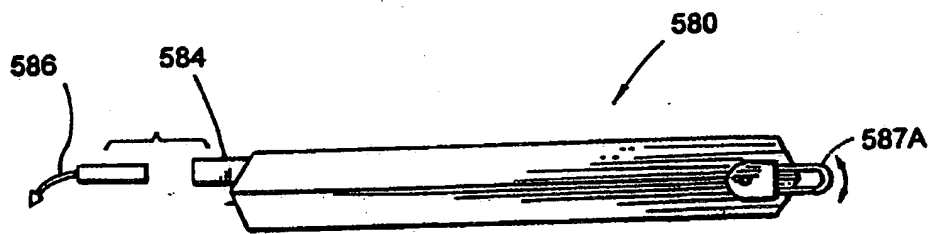


FIG. 38B

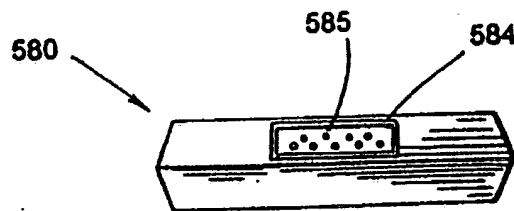


FIG. 38C

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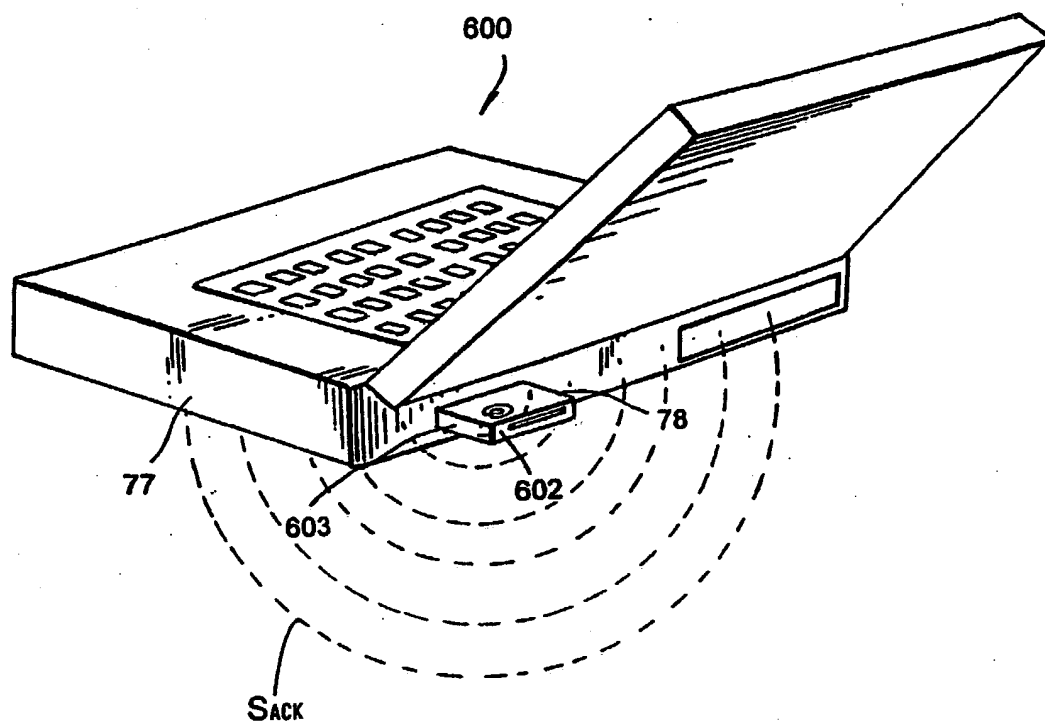


FIG. 39

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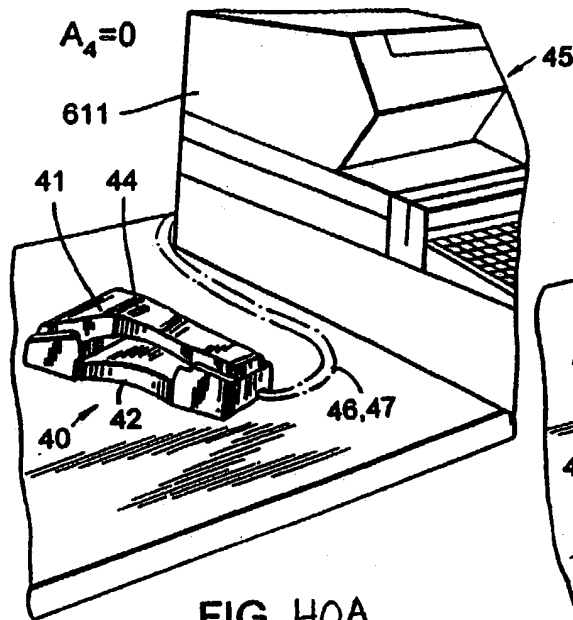


FIG. 40A

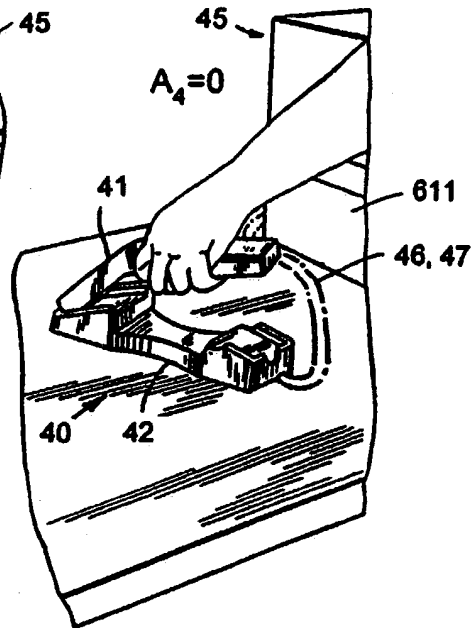


FIG. 40B

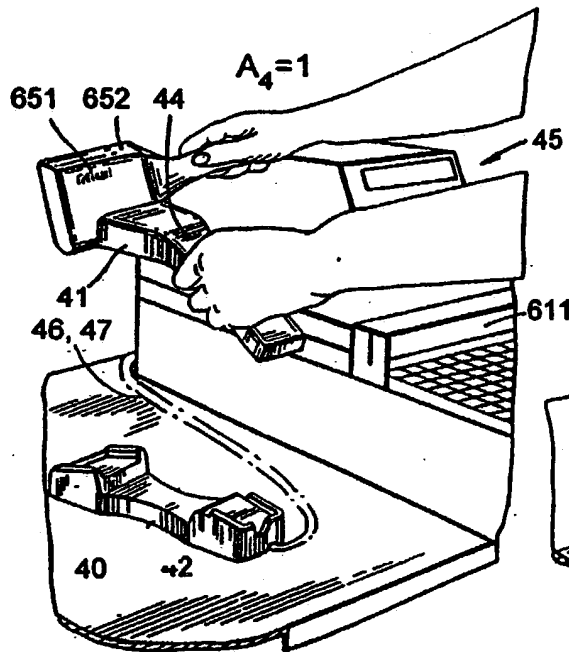


FIG. 40C

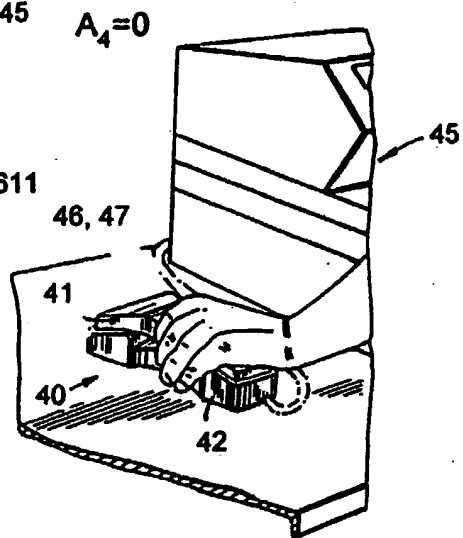


FIG. 40D

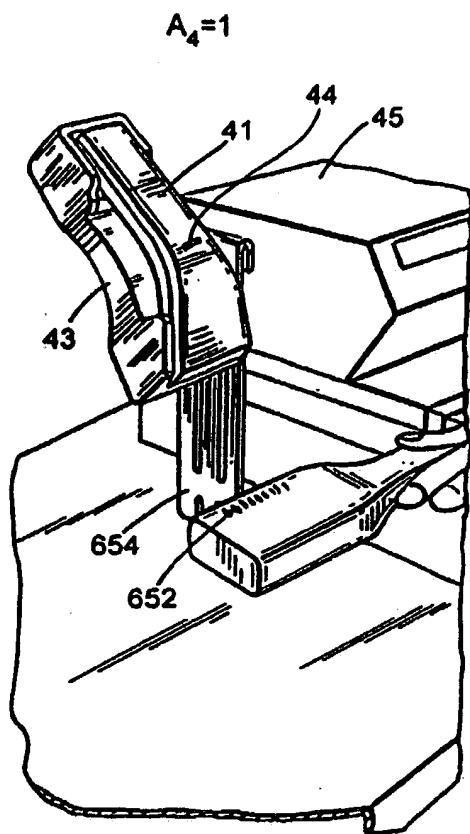


FIG. 41A

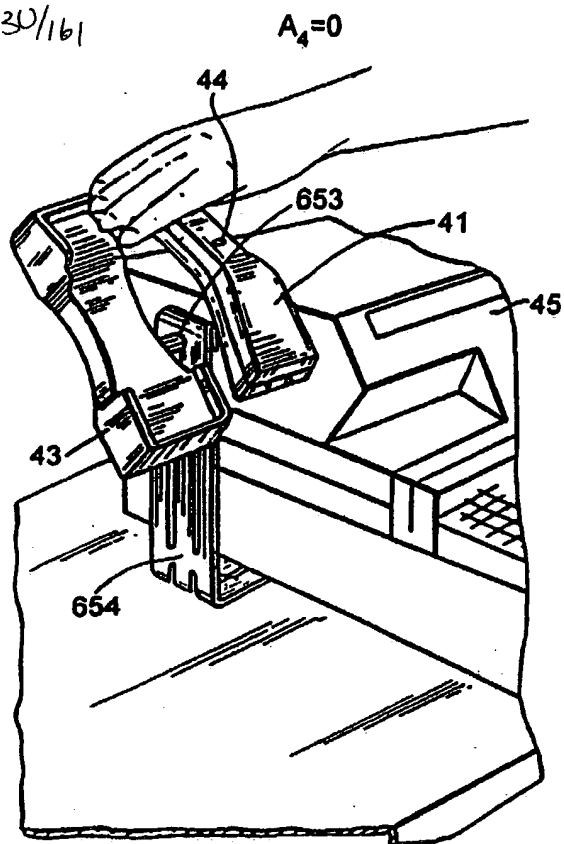


FIG. 41B

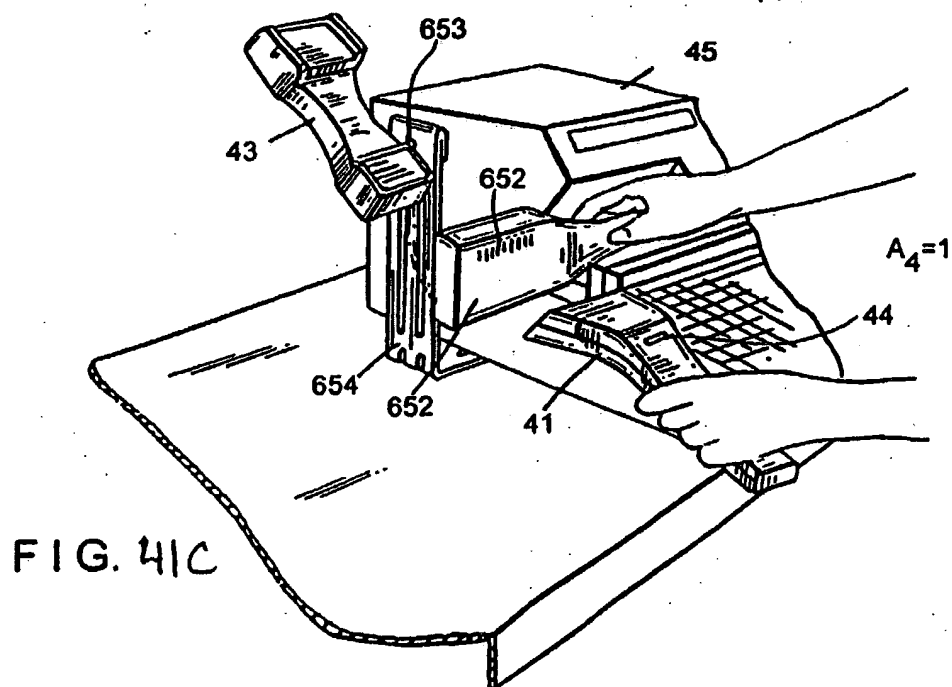


FIG. 41C

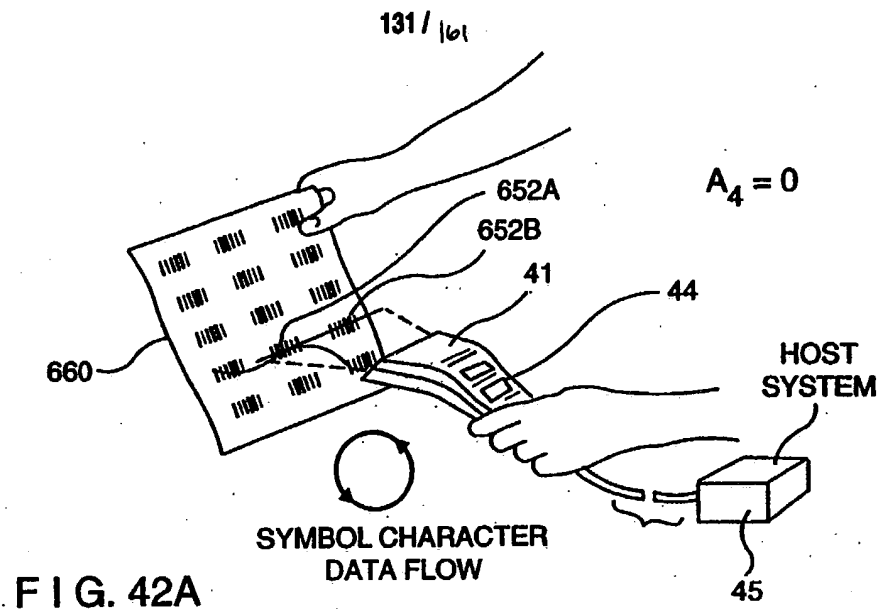


FIG. 42A

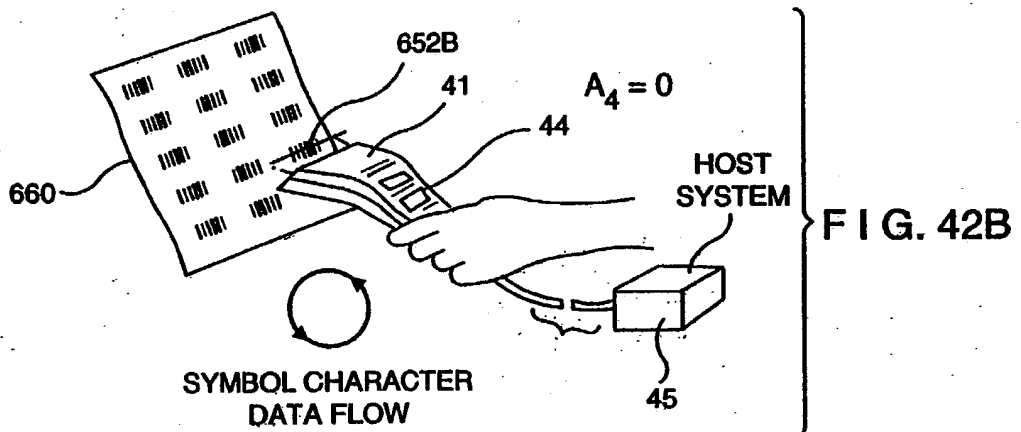


FIG. 42B

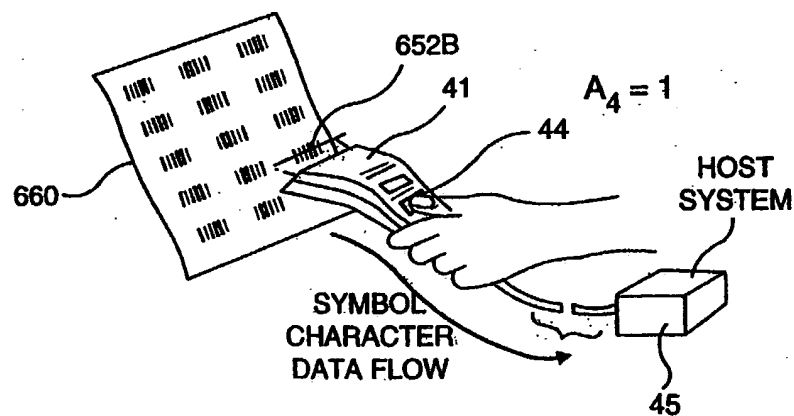
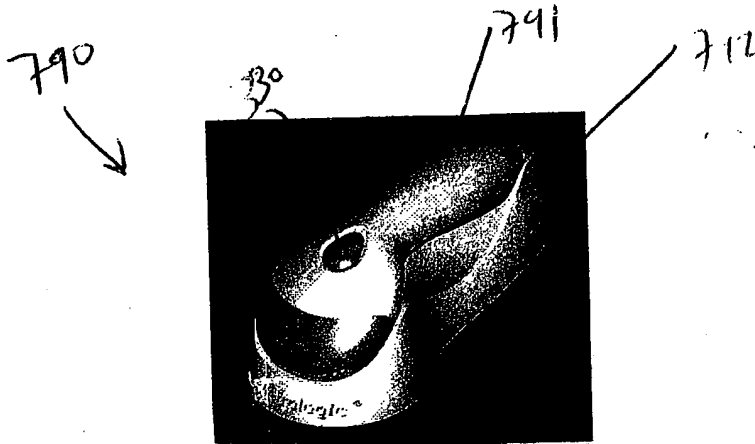


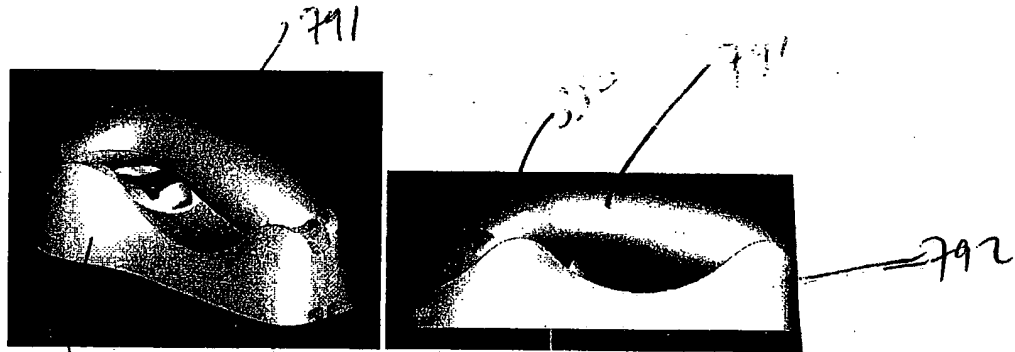
FIG. 42C

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Automatic Barcode
Reading
System with
2-WAY
RF Communication
Link

FIG. 43A



712 FIG. 43B

FIG. 43C

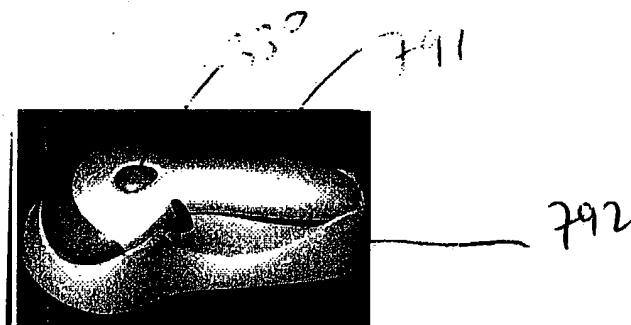


FIG. 43D

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Protracted Configuration

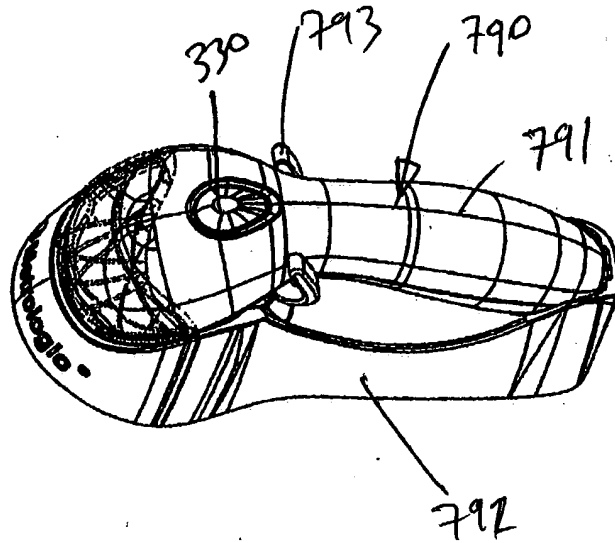


FIG. 43F

Protracted Configuration

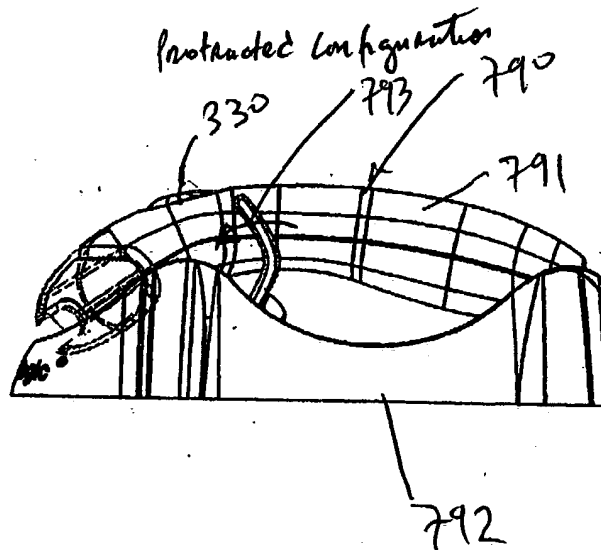


FIG. 43E

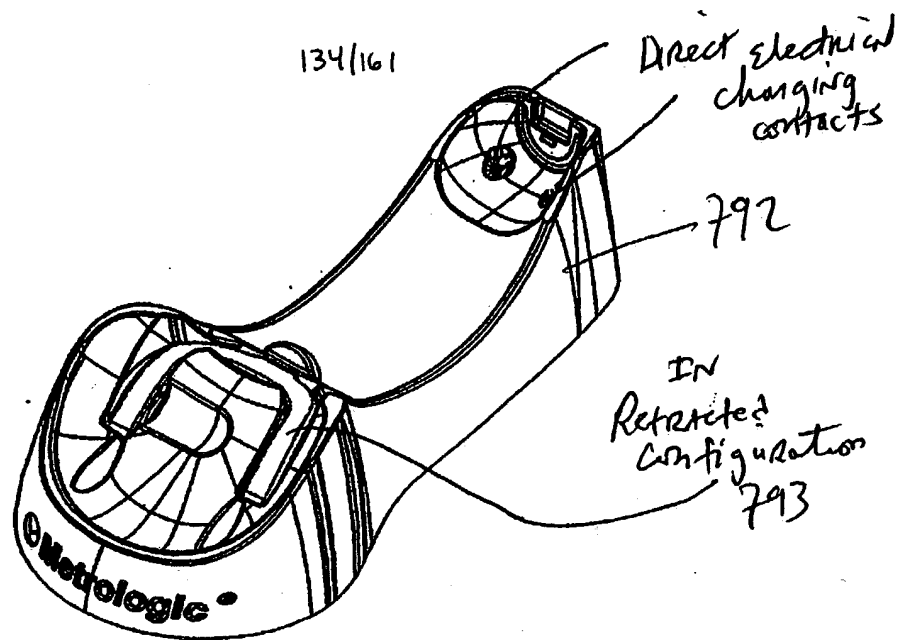


FIG. 43G

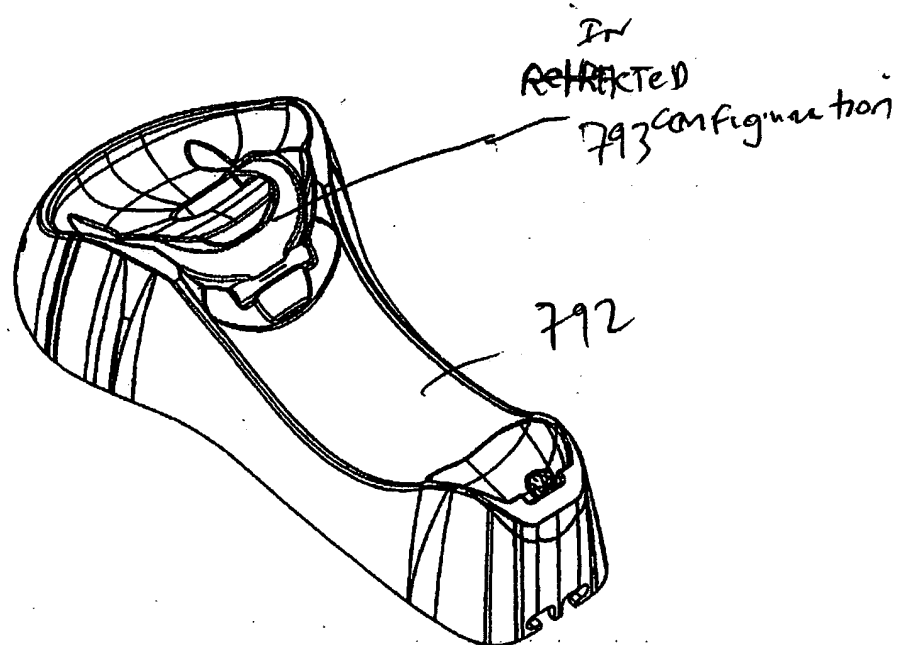


FIG. 43H

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Retracted Configuration
793



FIG. 43I 792

Projected Configuration
793

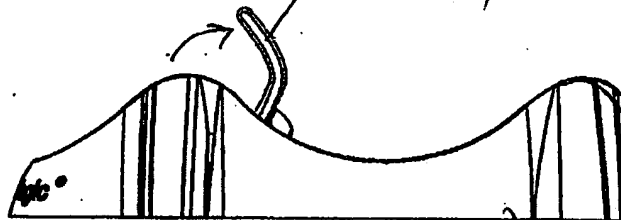


FIG. 43J 792

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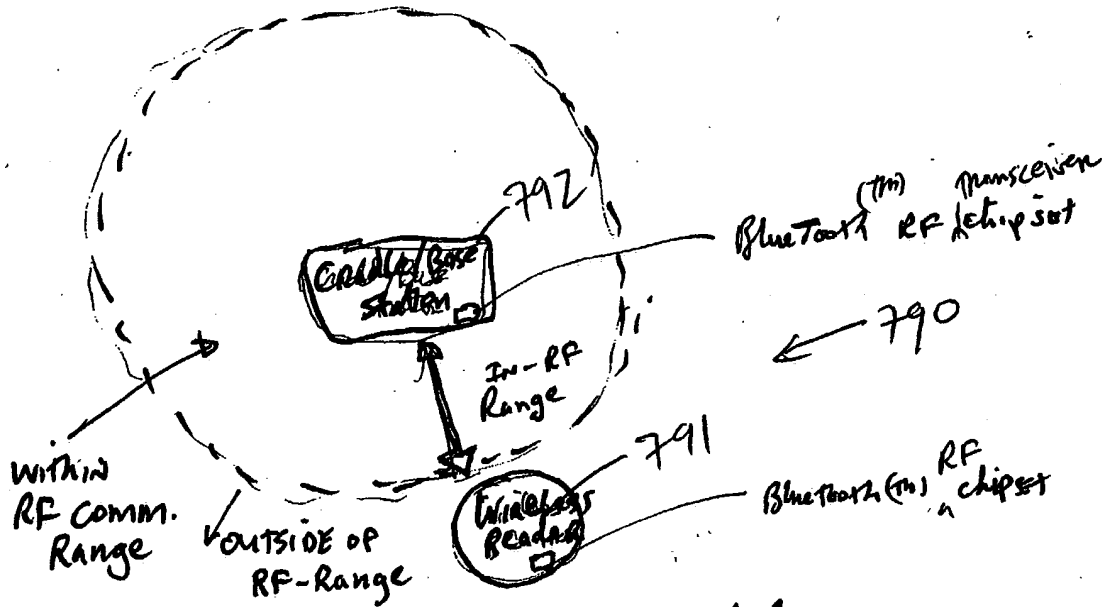


FIG. 44A1

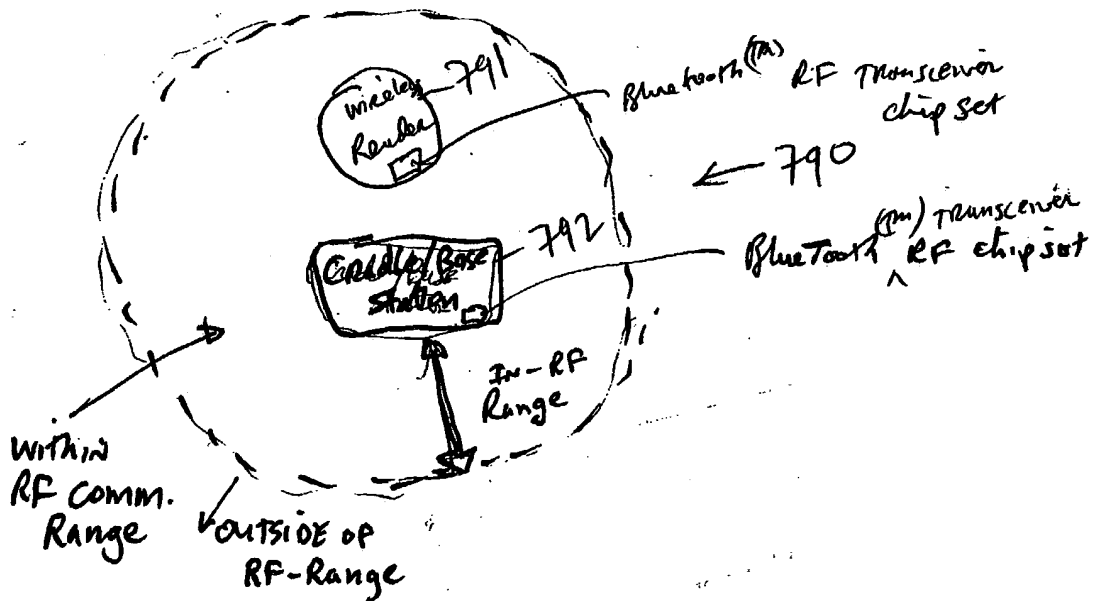


FIG. 44A2

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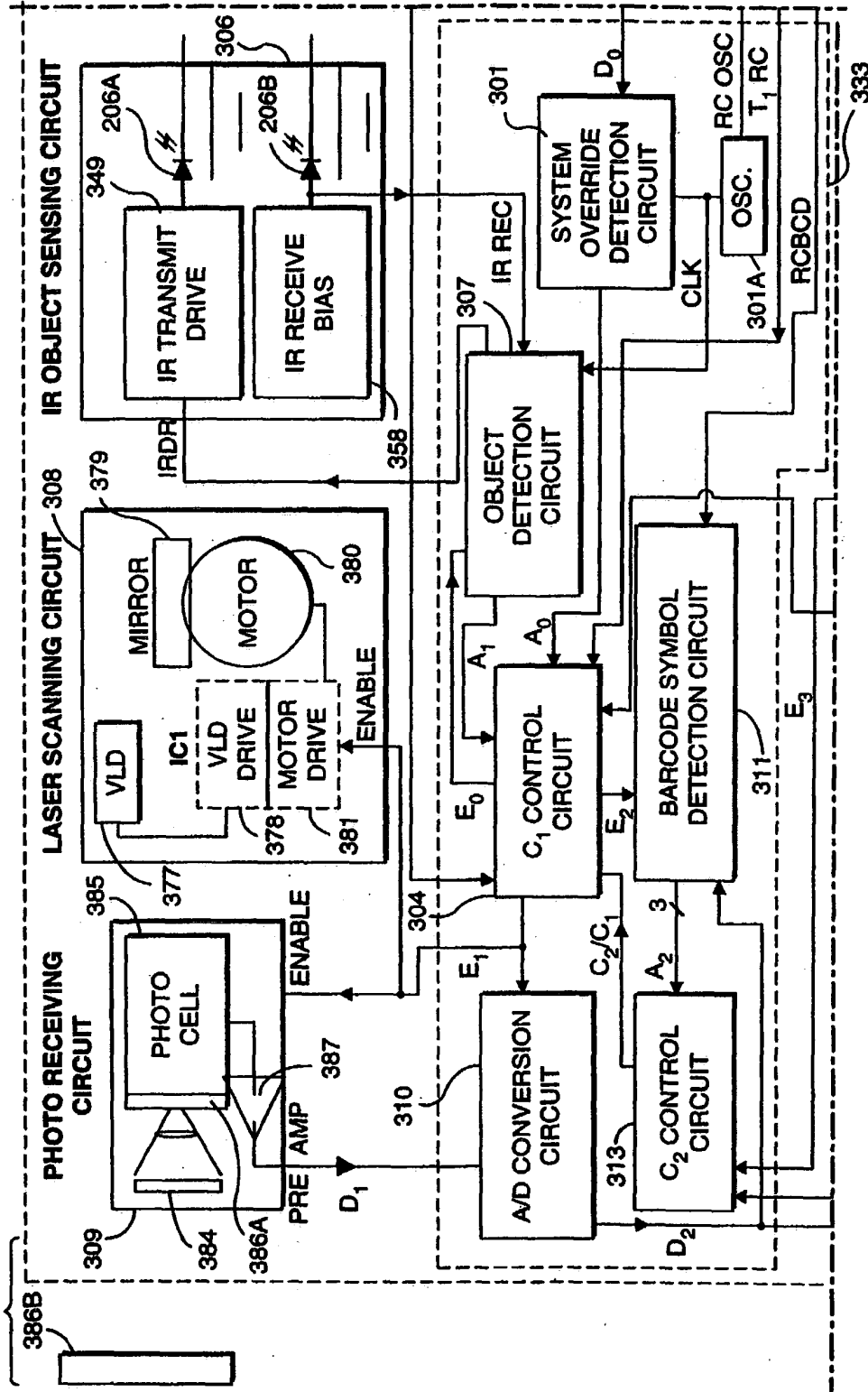


FIG 45A1

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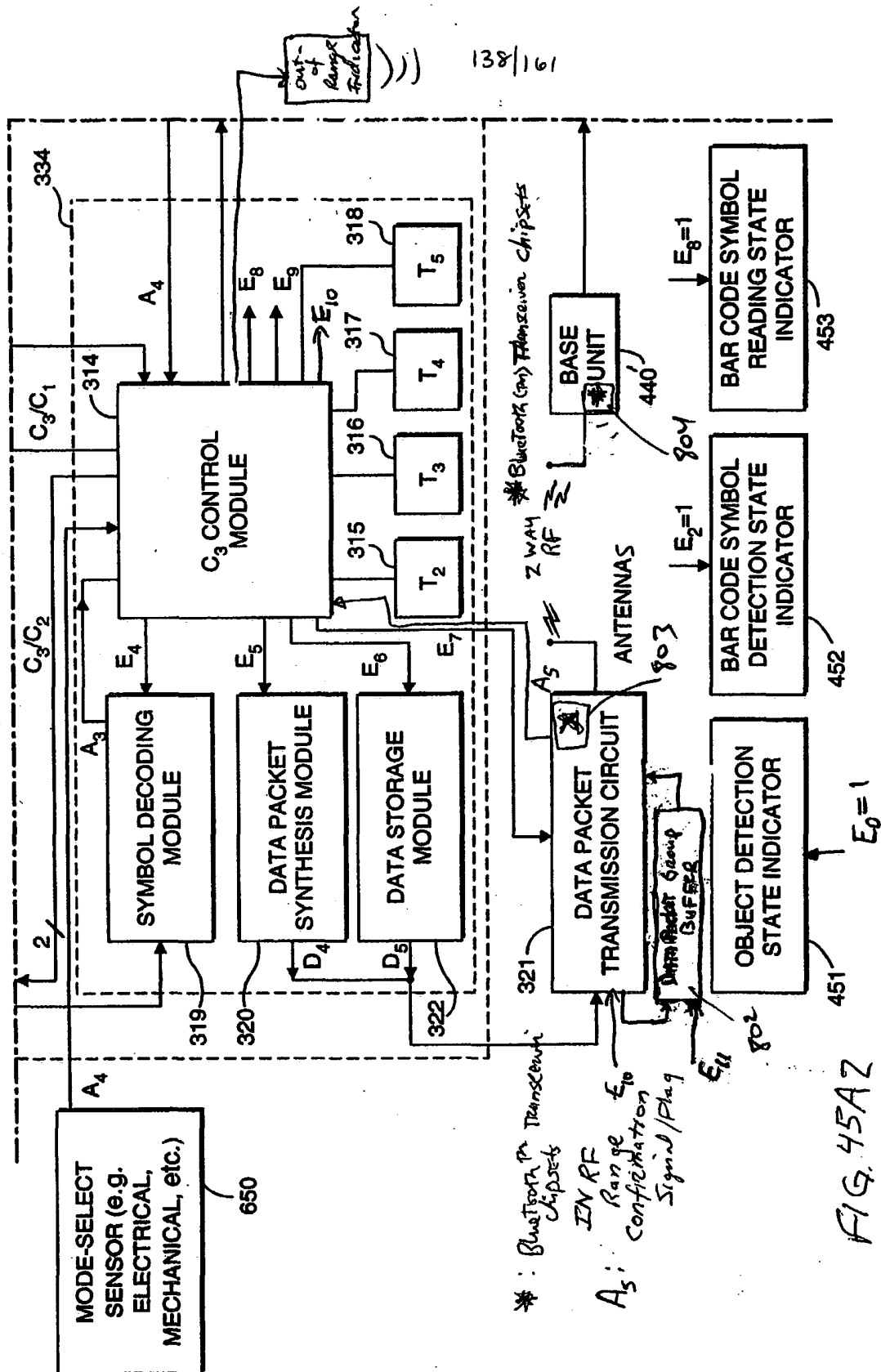
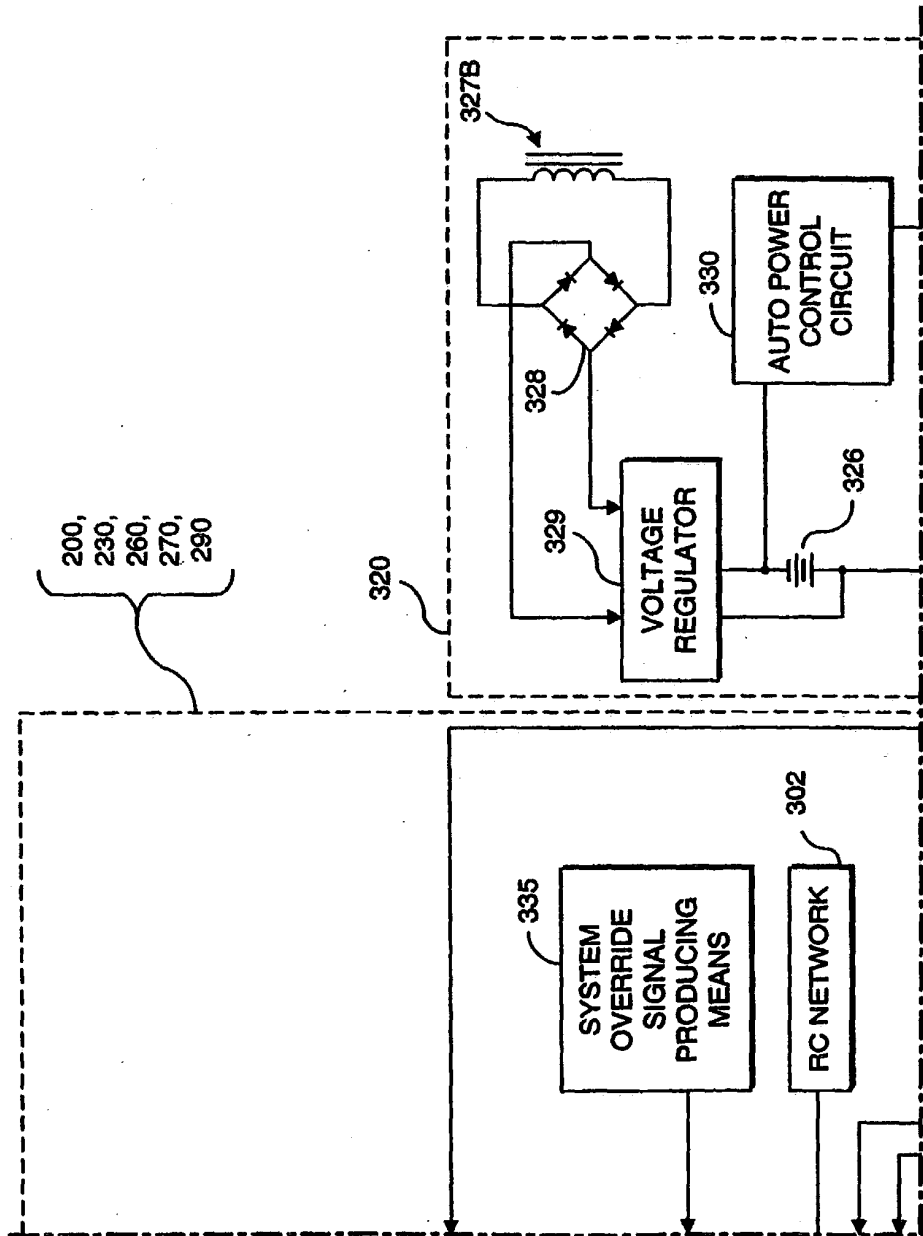


FIG. 45A2



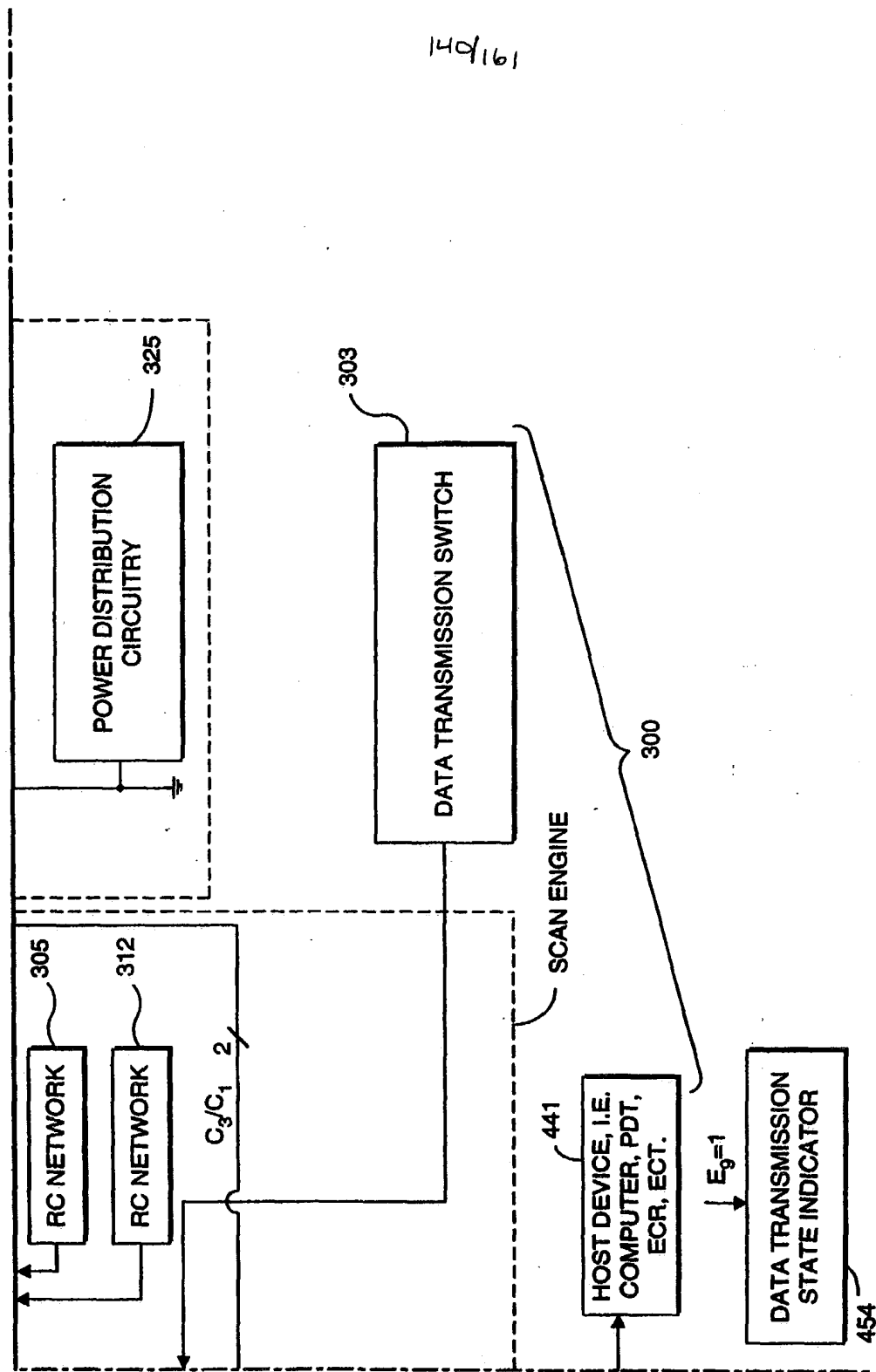


FIG. 45A4

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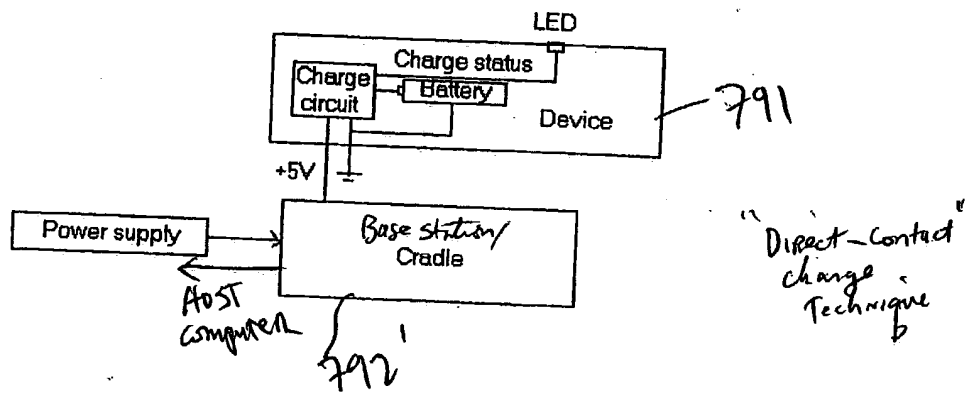


FIG. 45B

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DATA Packet
TRANSMISSION VIA
2-WAY RF WITH Automatic
RF-Range Dependent
Control

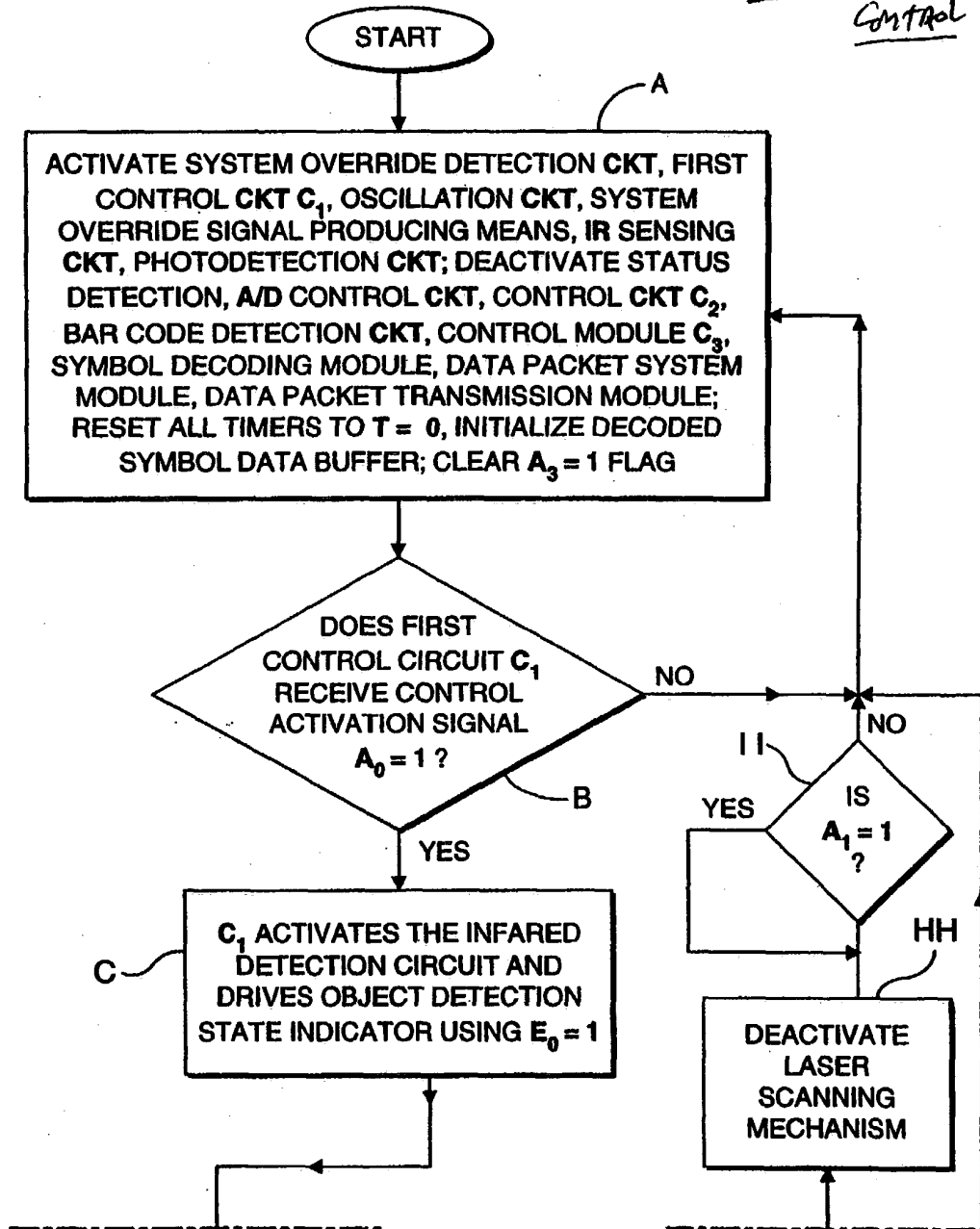


FIG. 46A1

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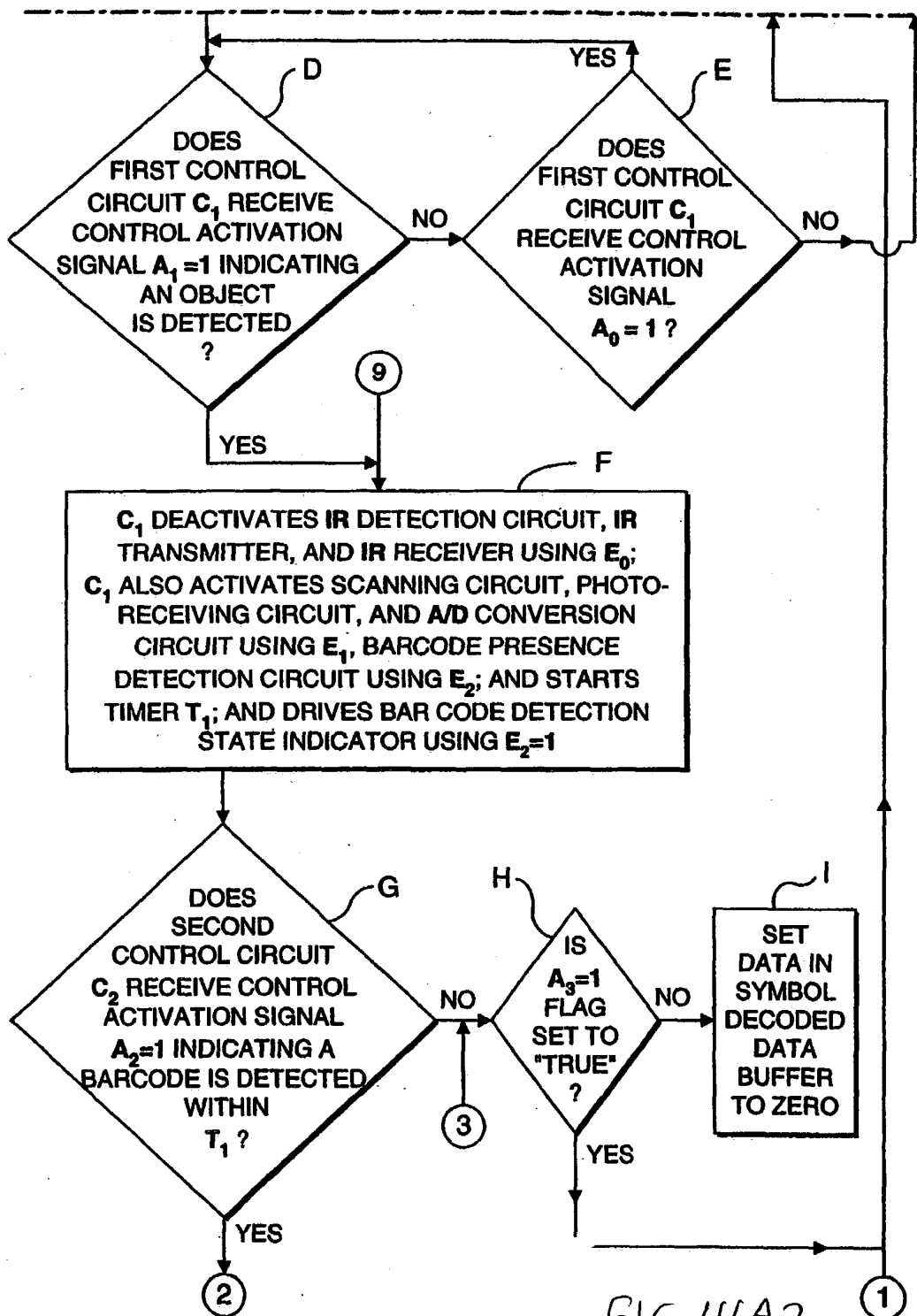


FIG 46A2

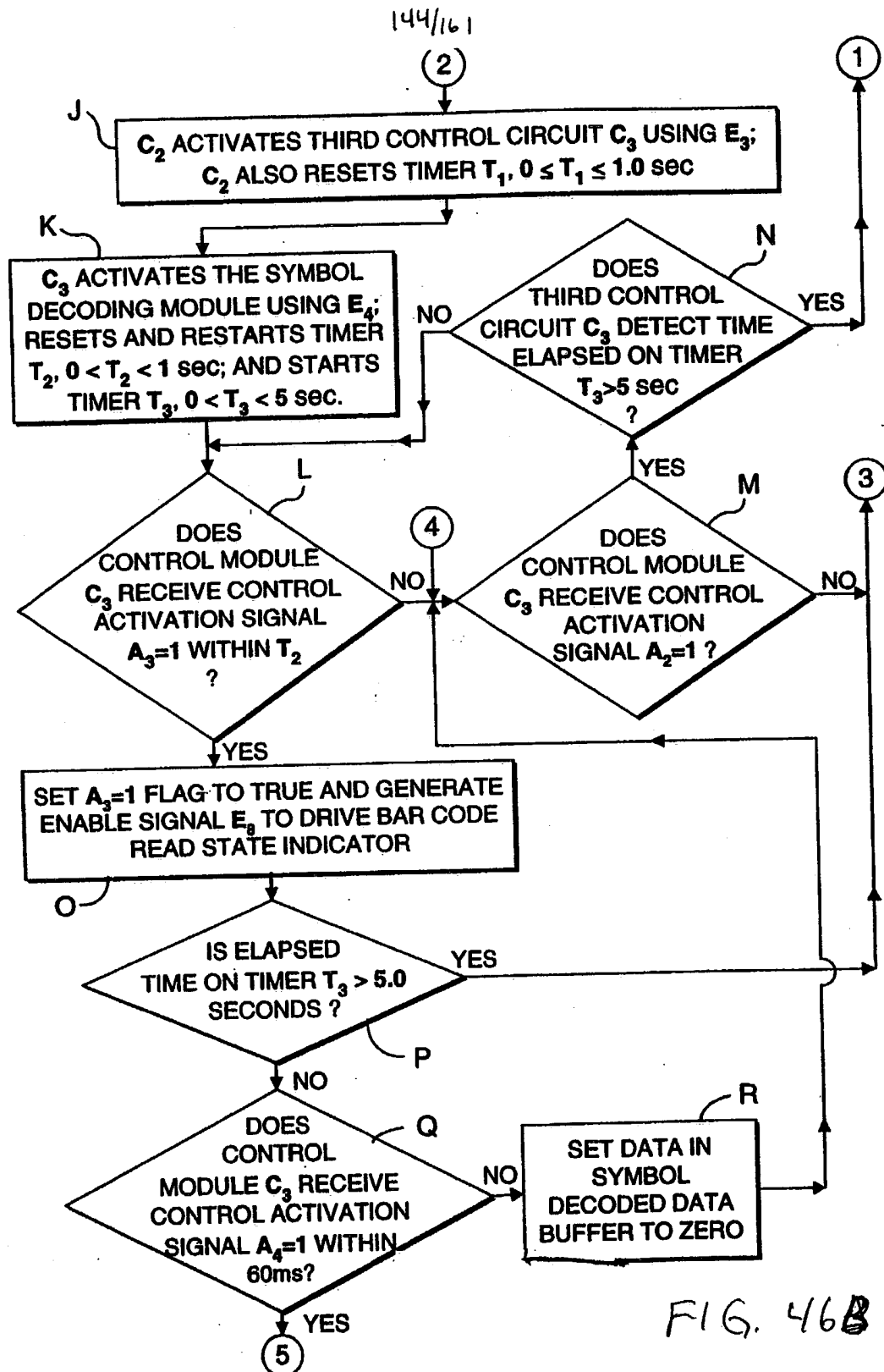


FIG. 46B

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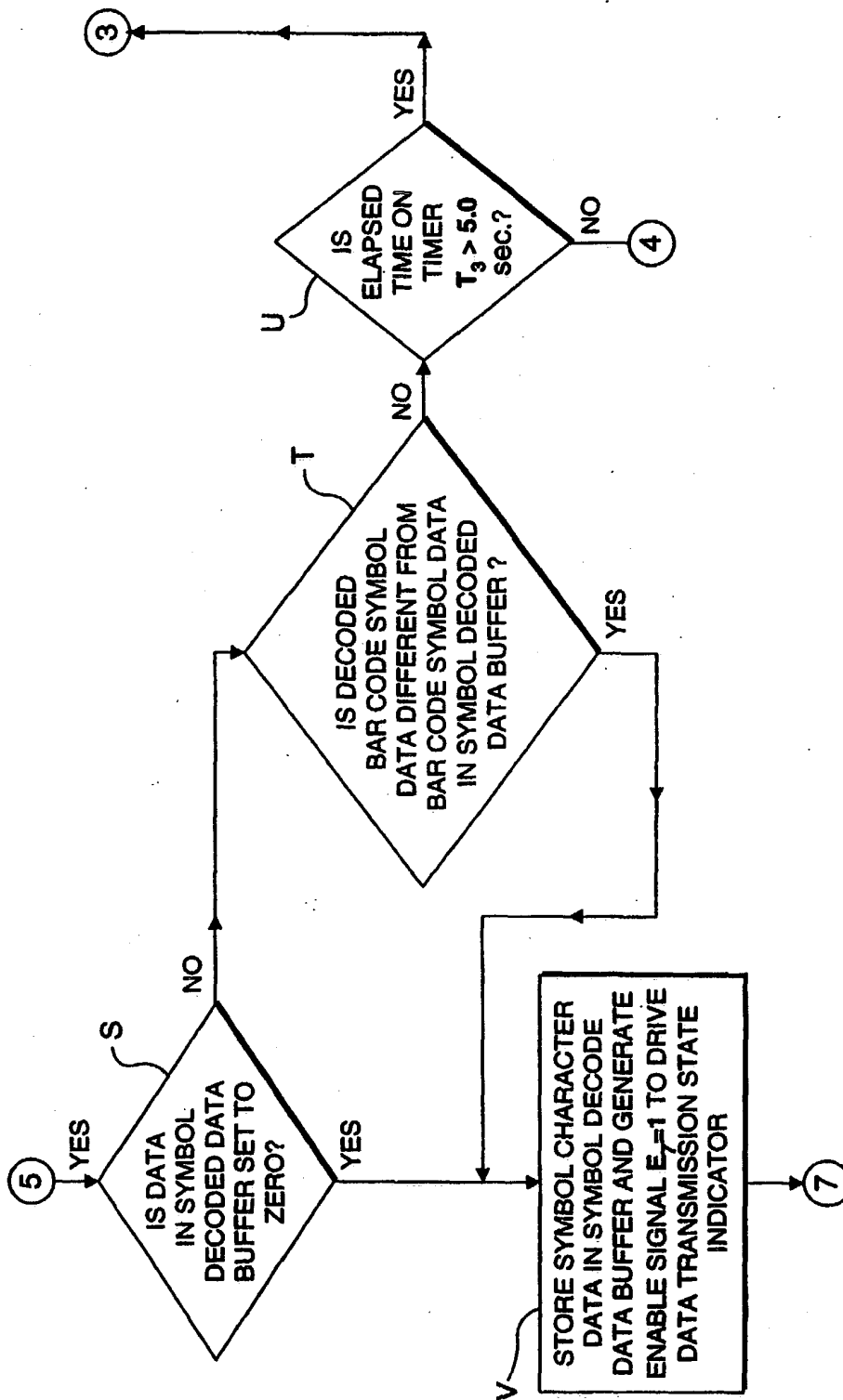
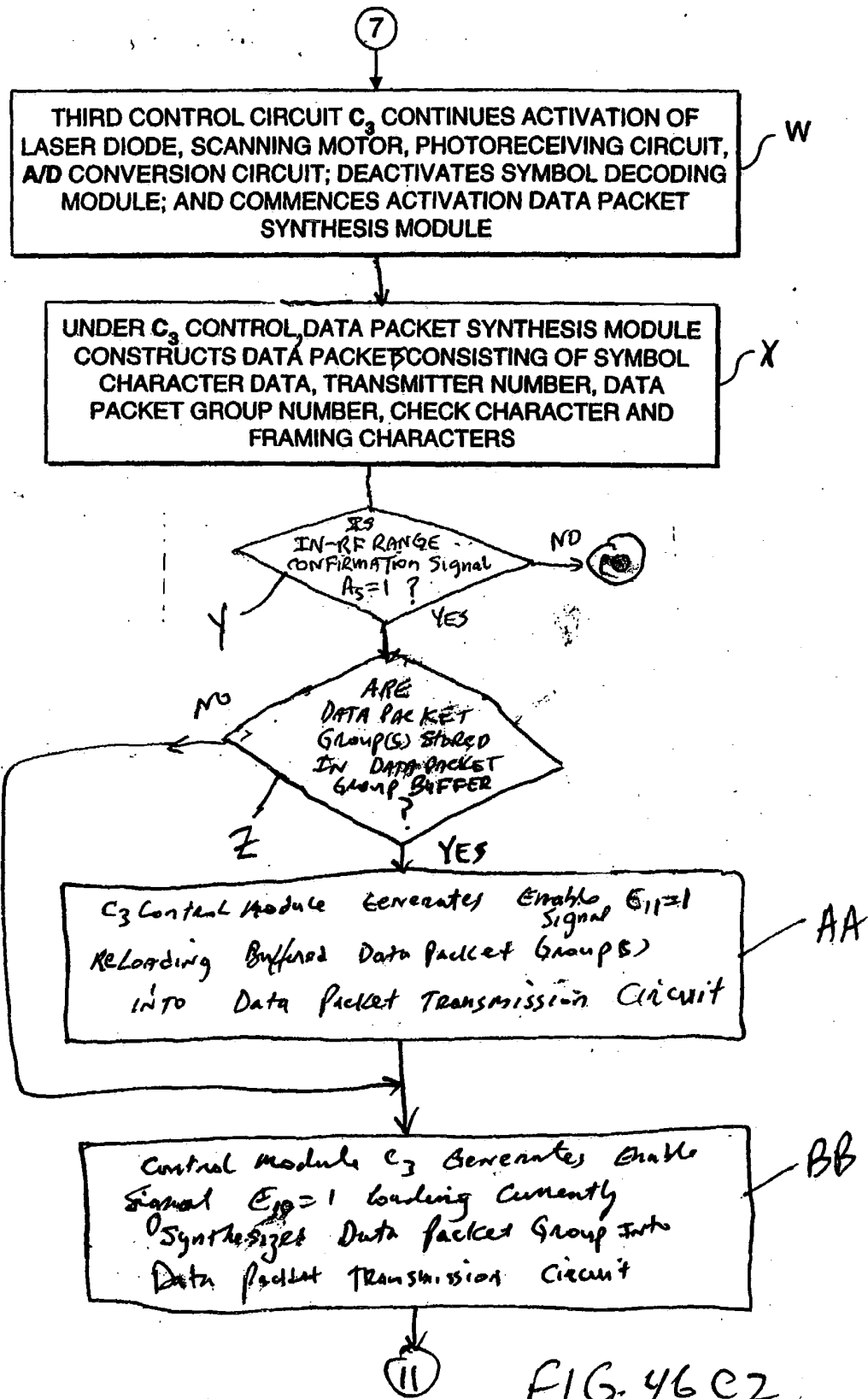


FIG 46C1

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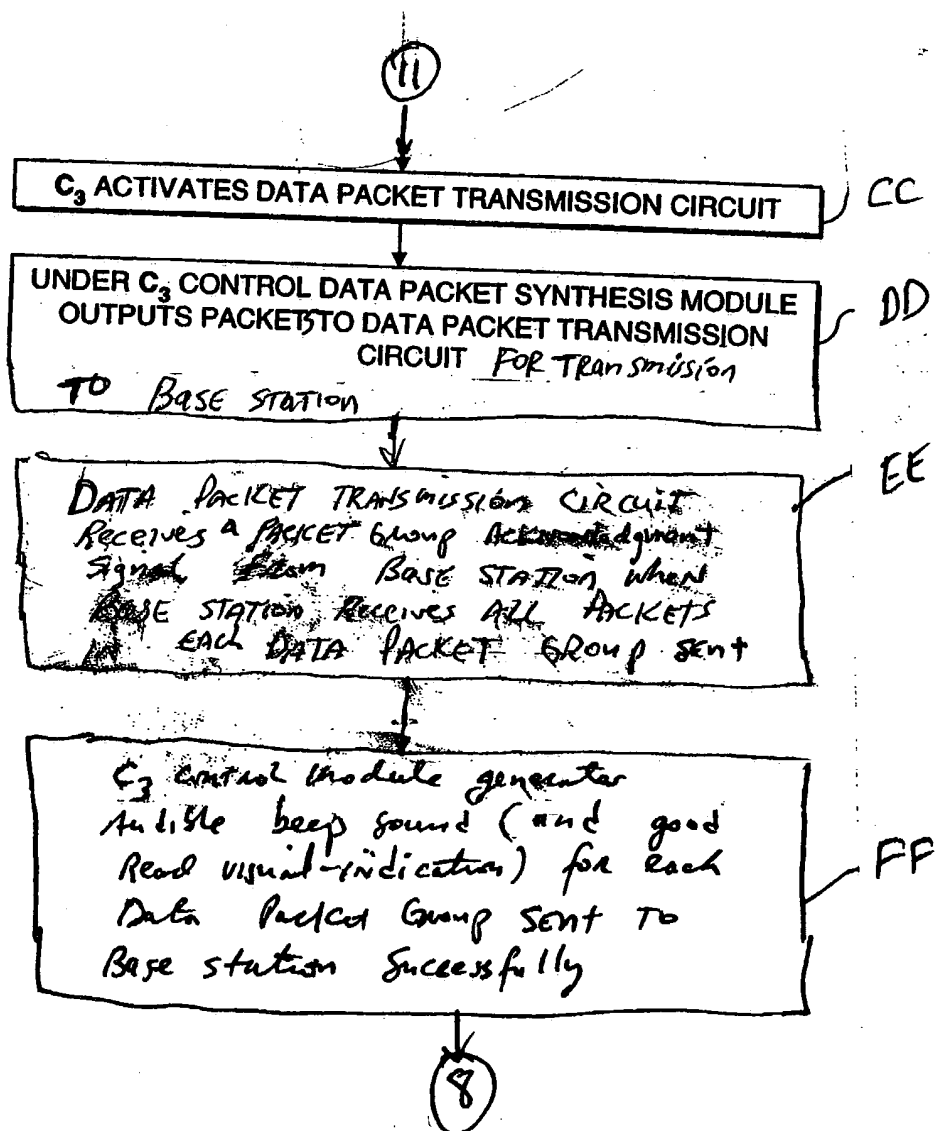


FIG. 46C3

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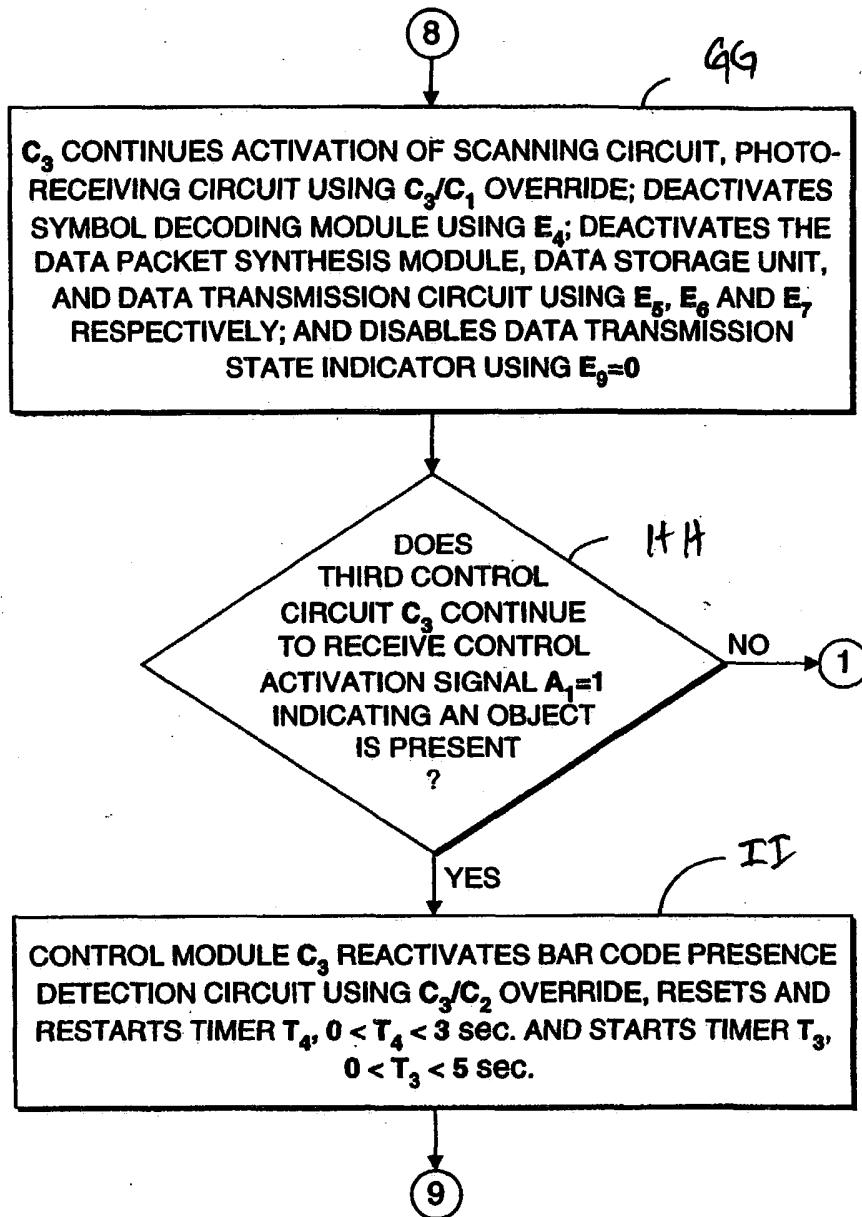


FIG 46 C4

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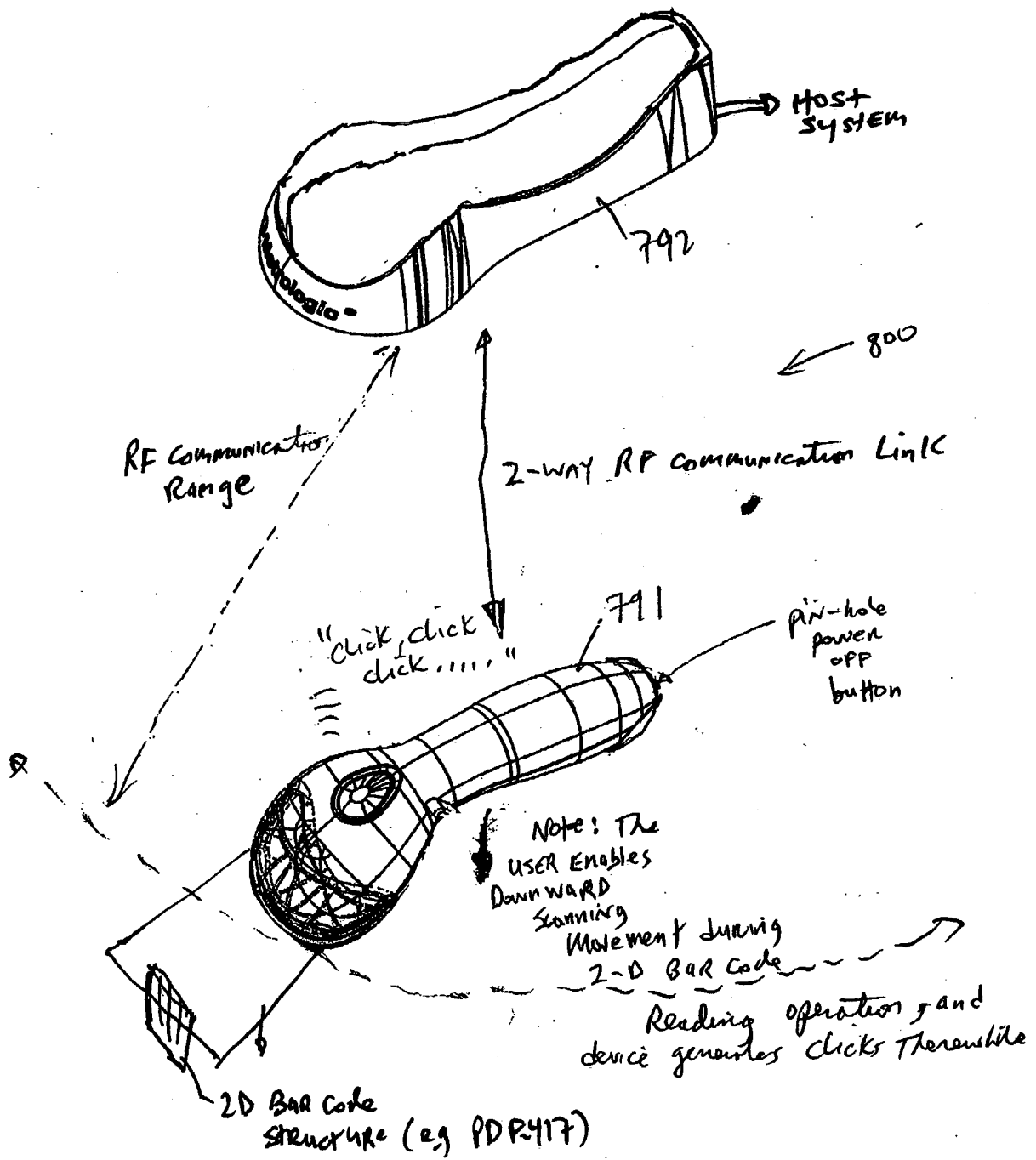
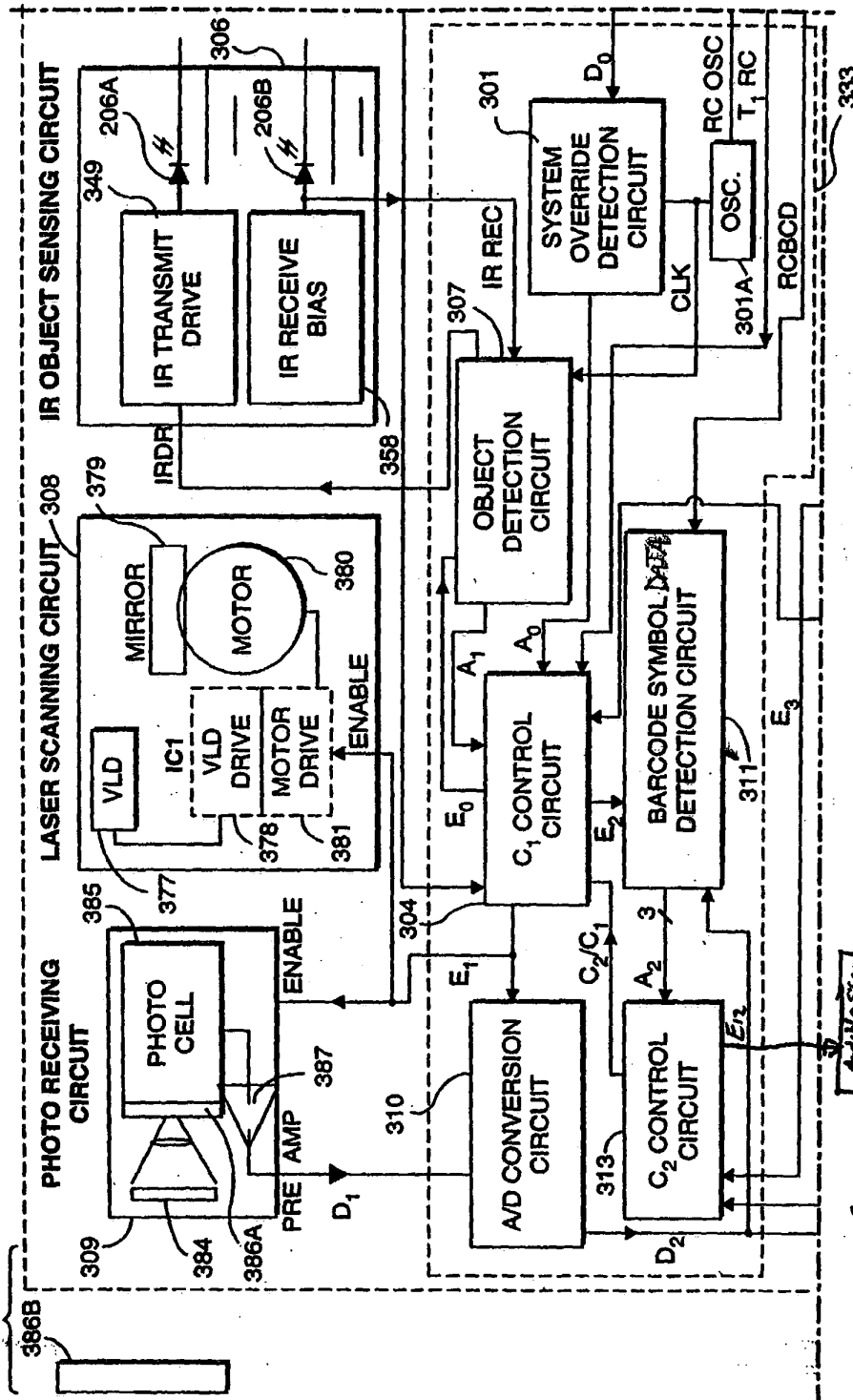
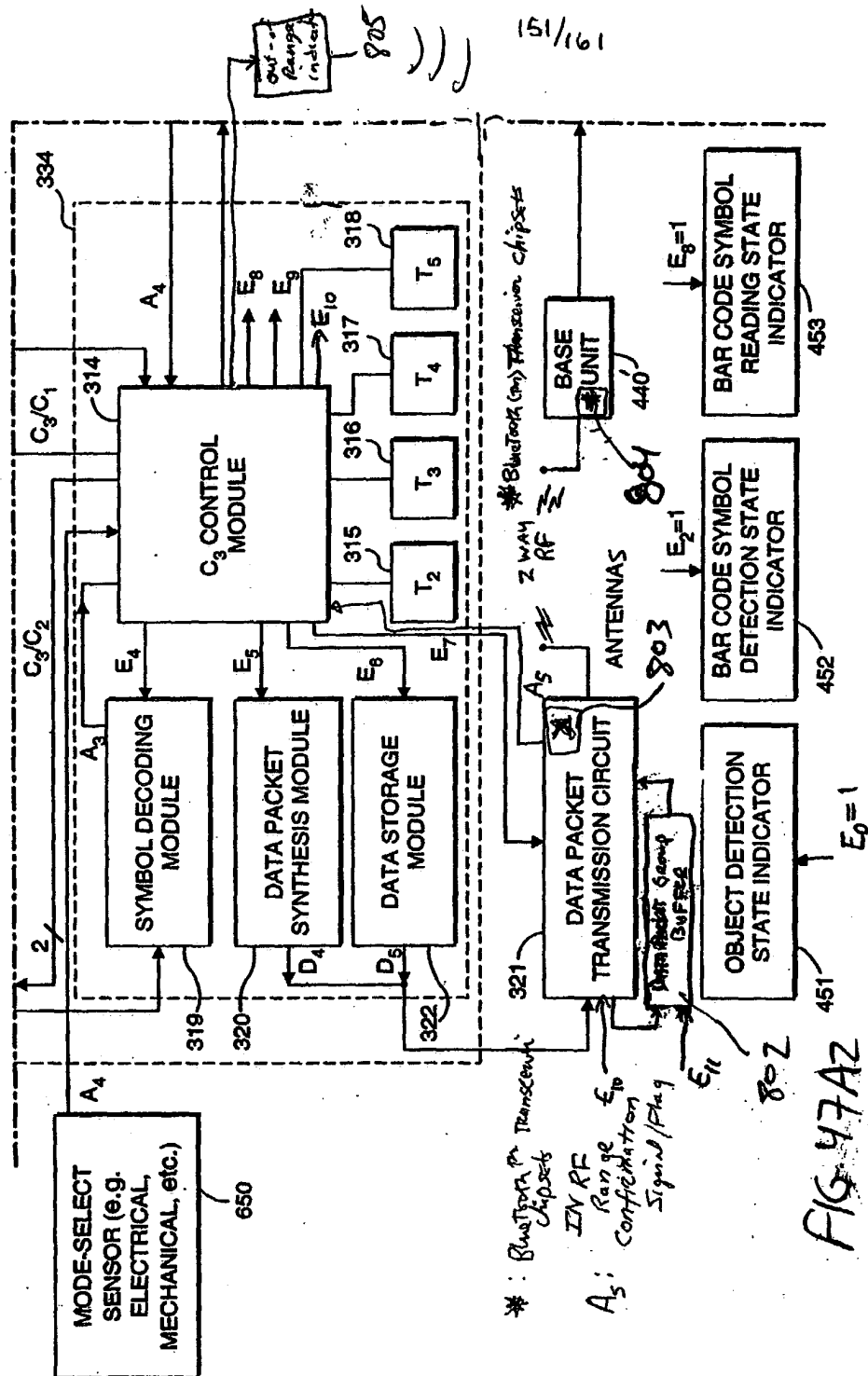


FIG. 47

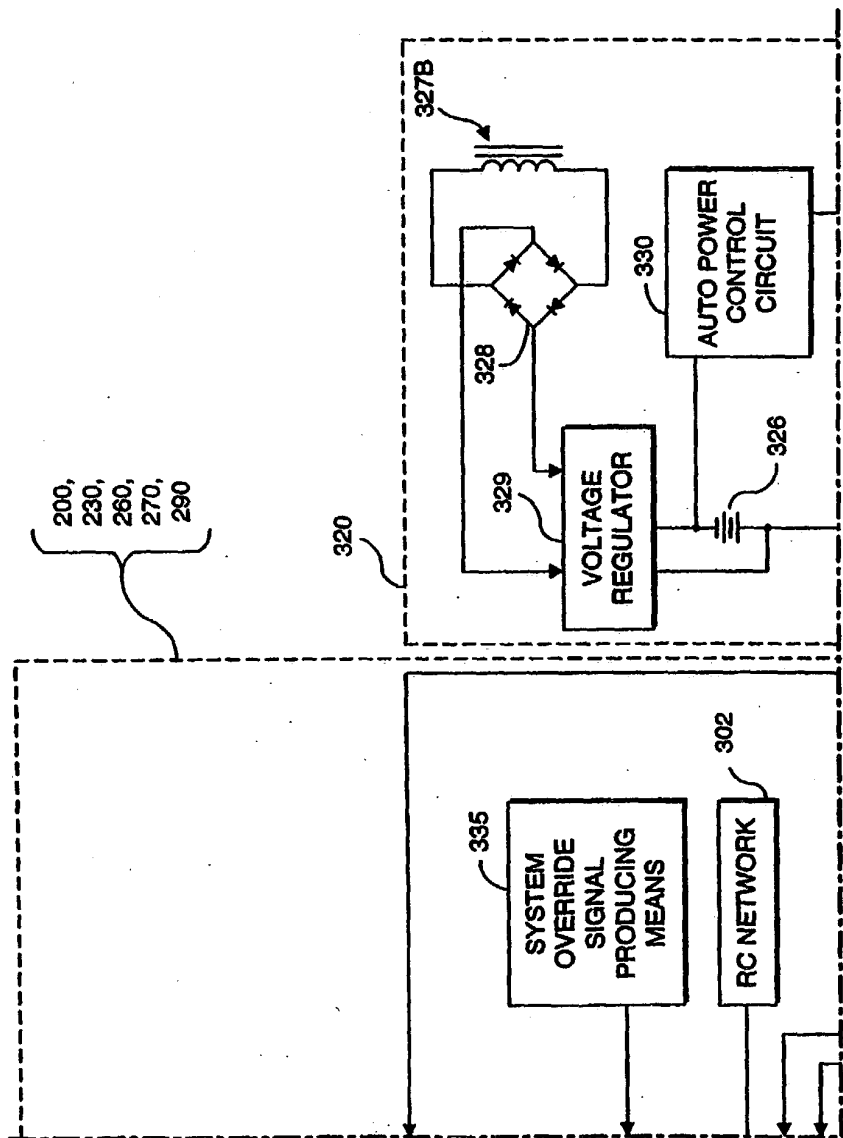
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FIG 47A3



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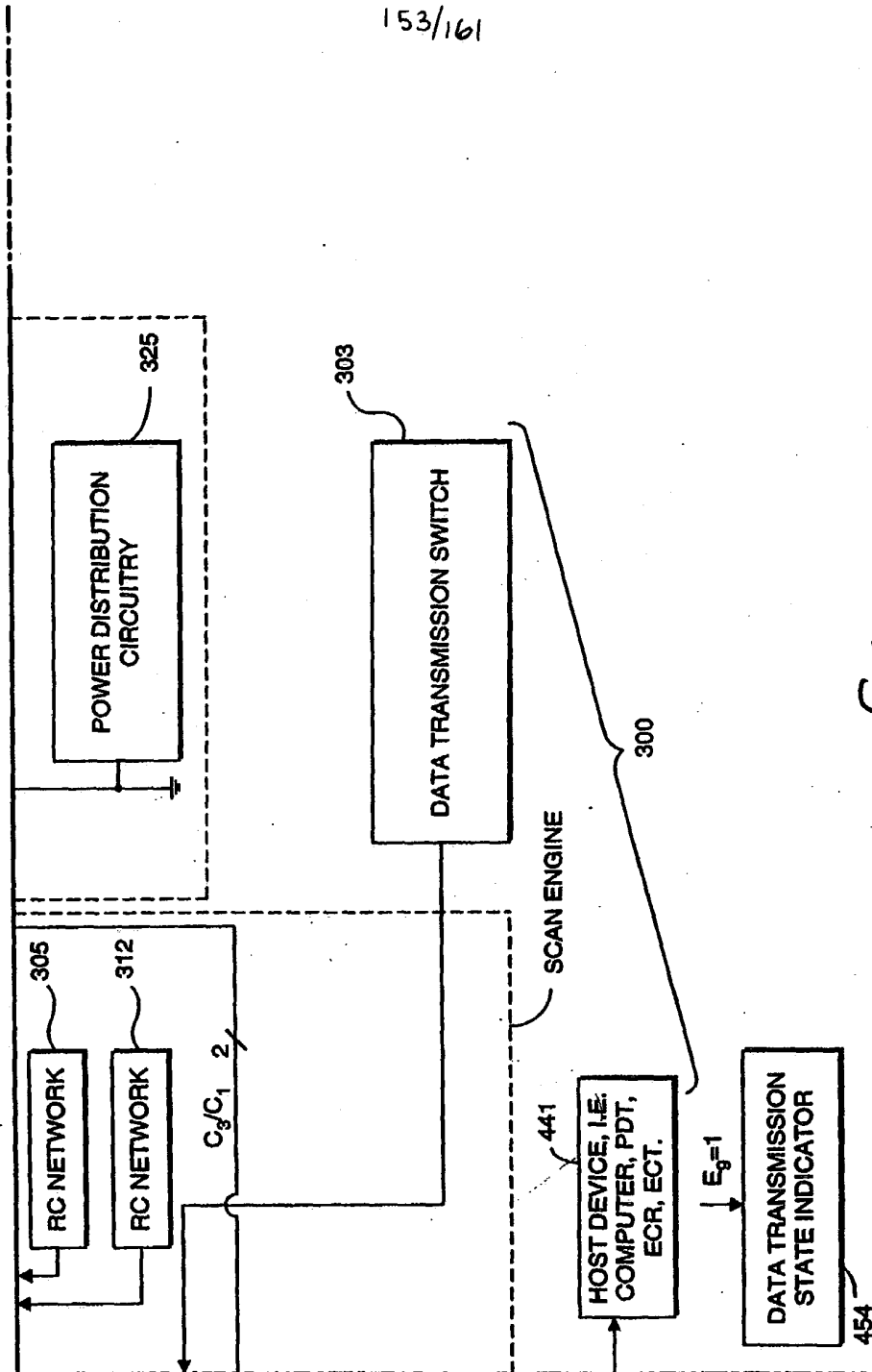


FIG. 47A4

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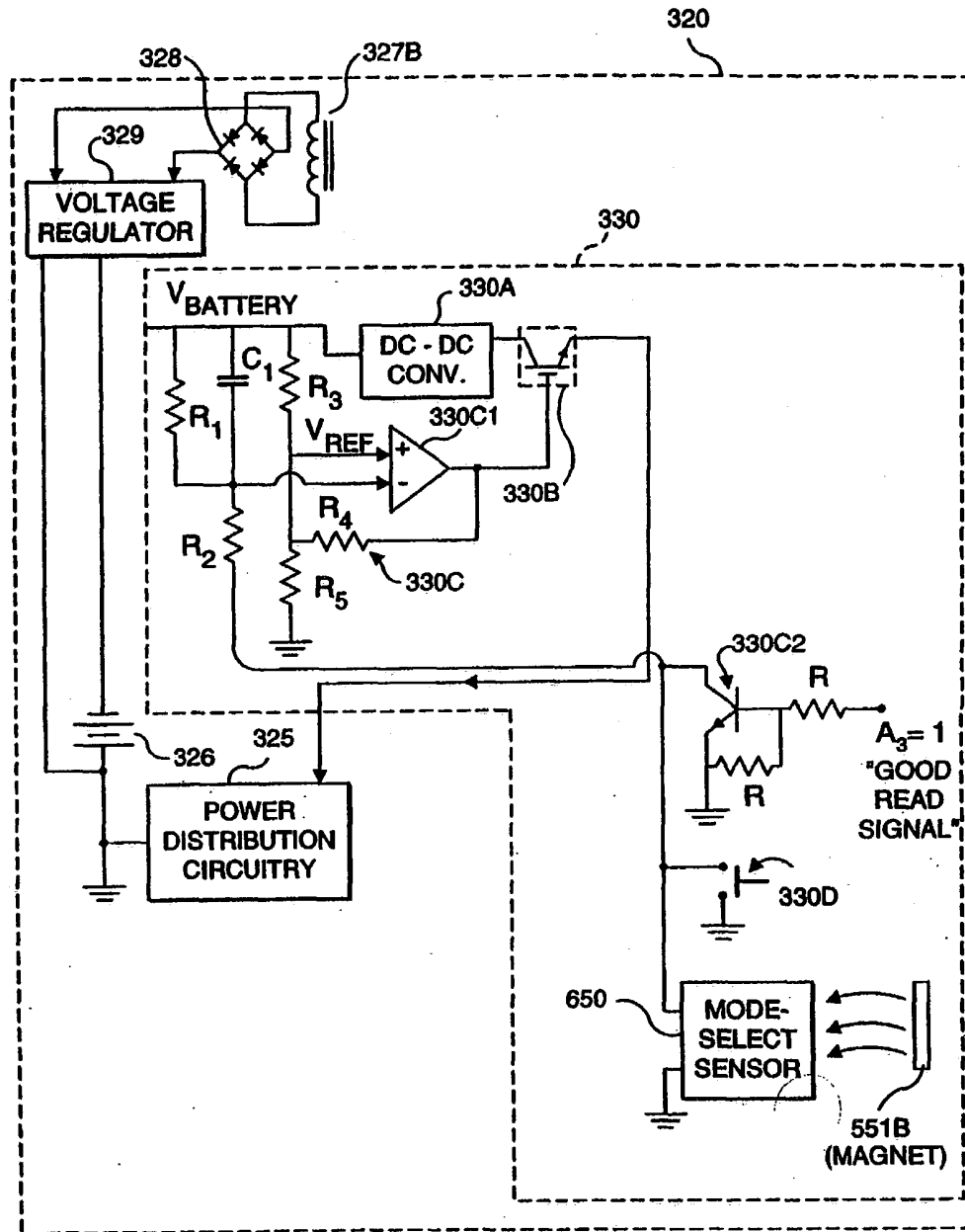


FIG. 47B

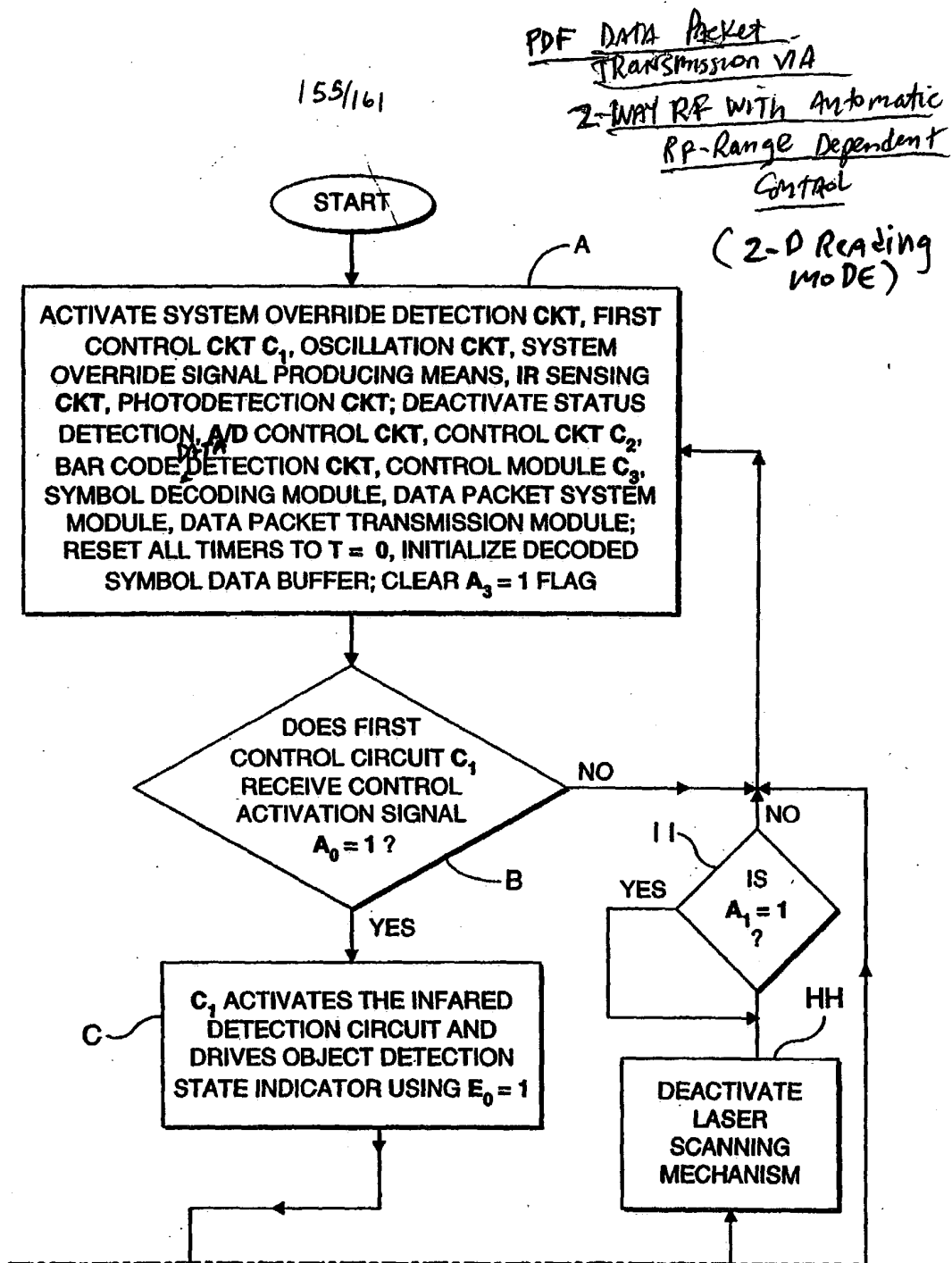


FIG. 48A1

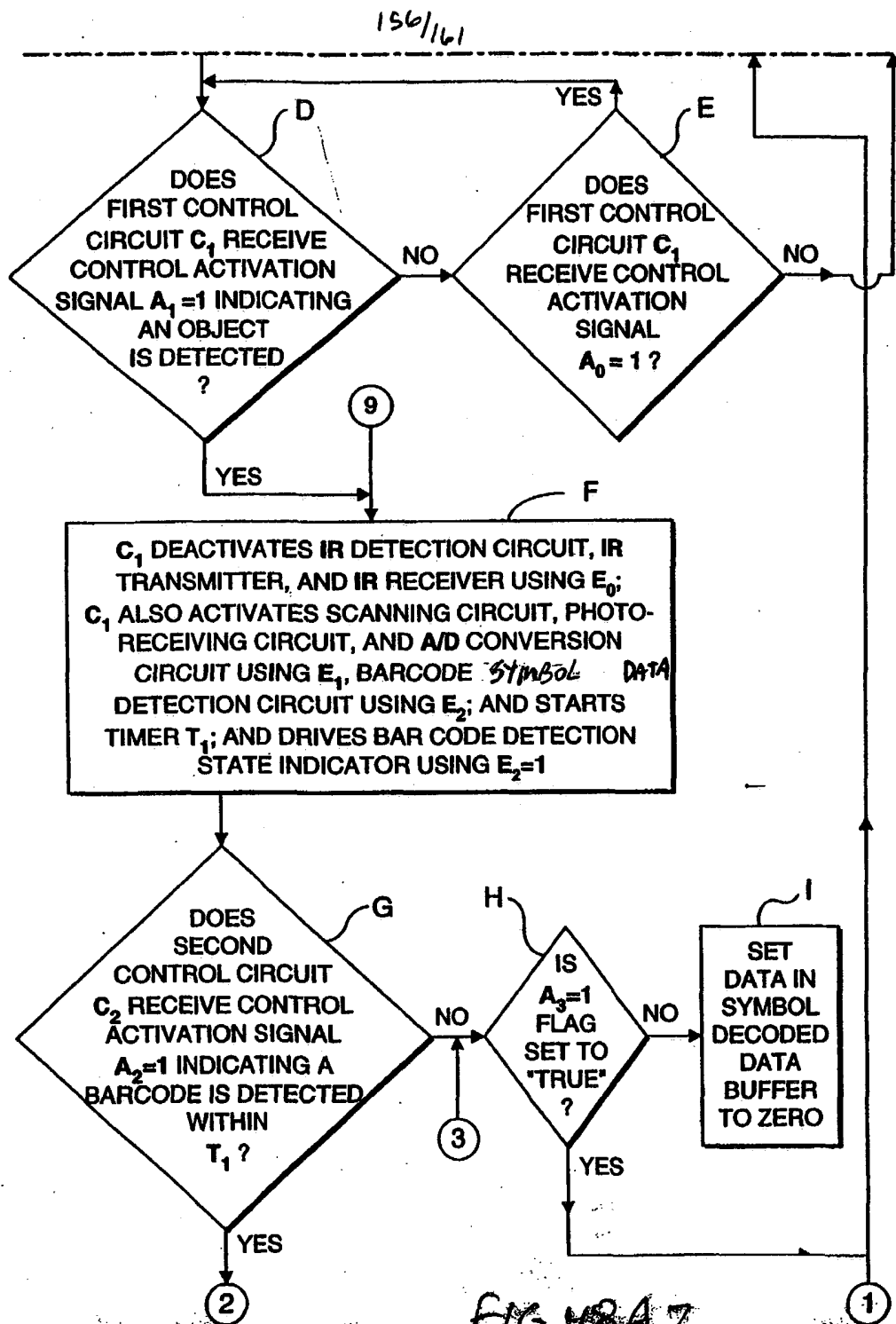
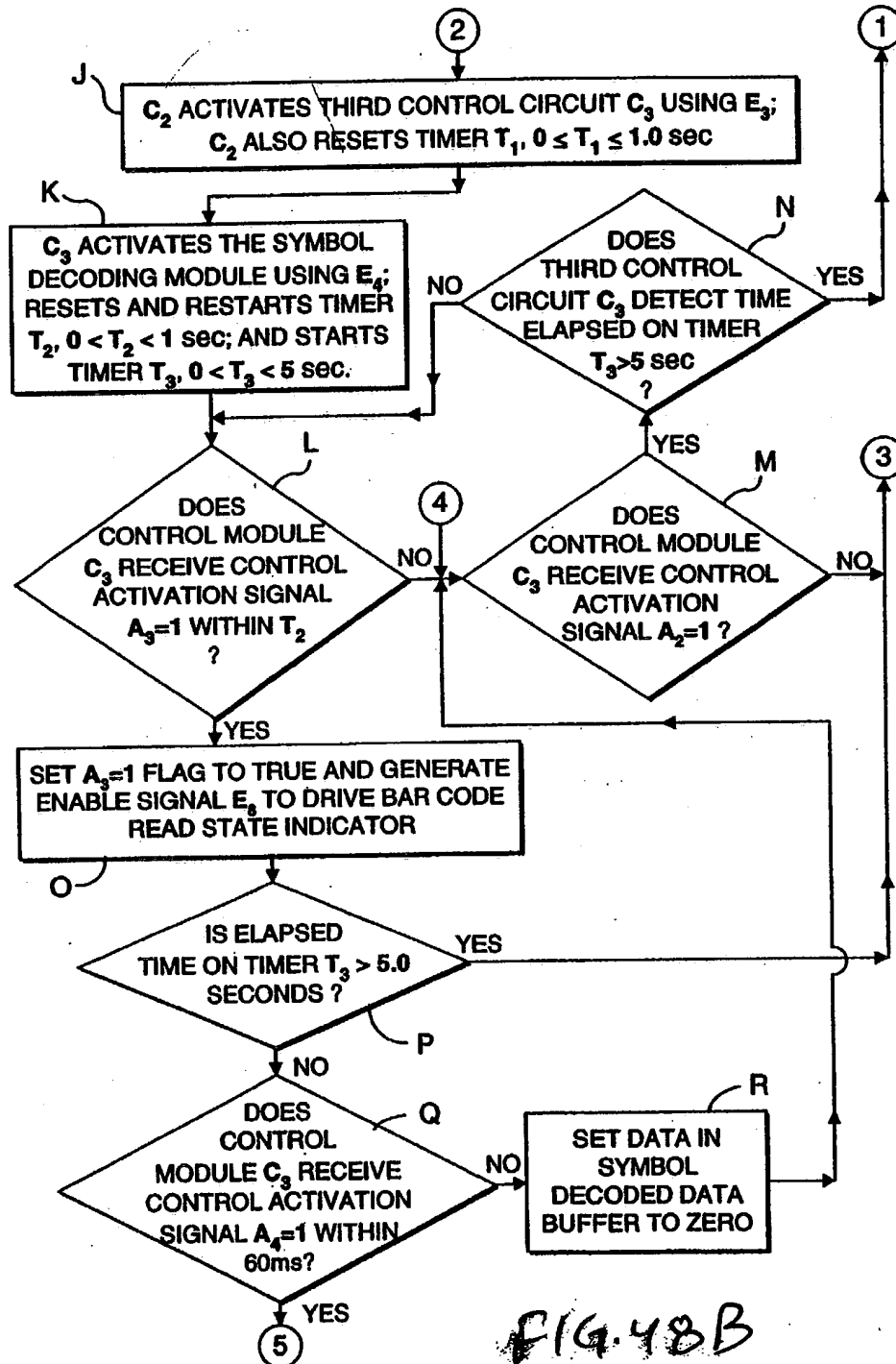


FIG. 12A2

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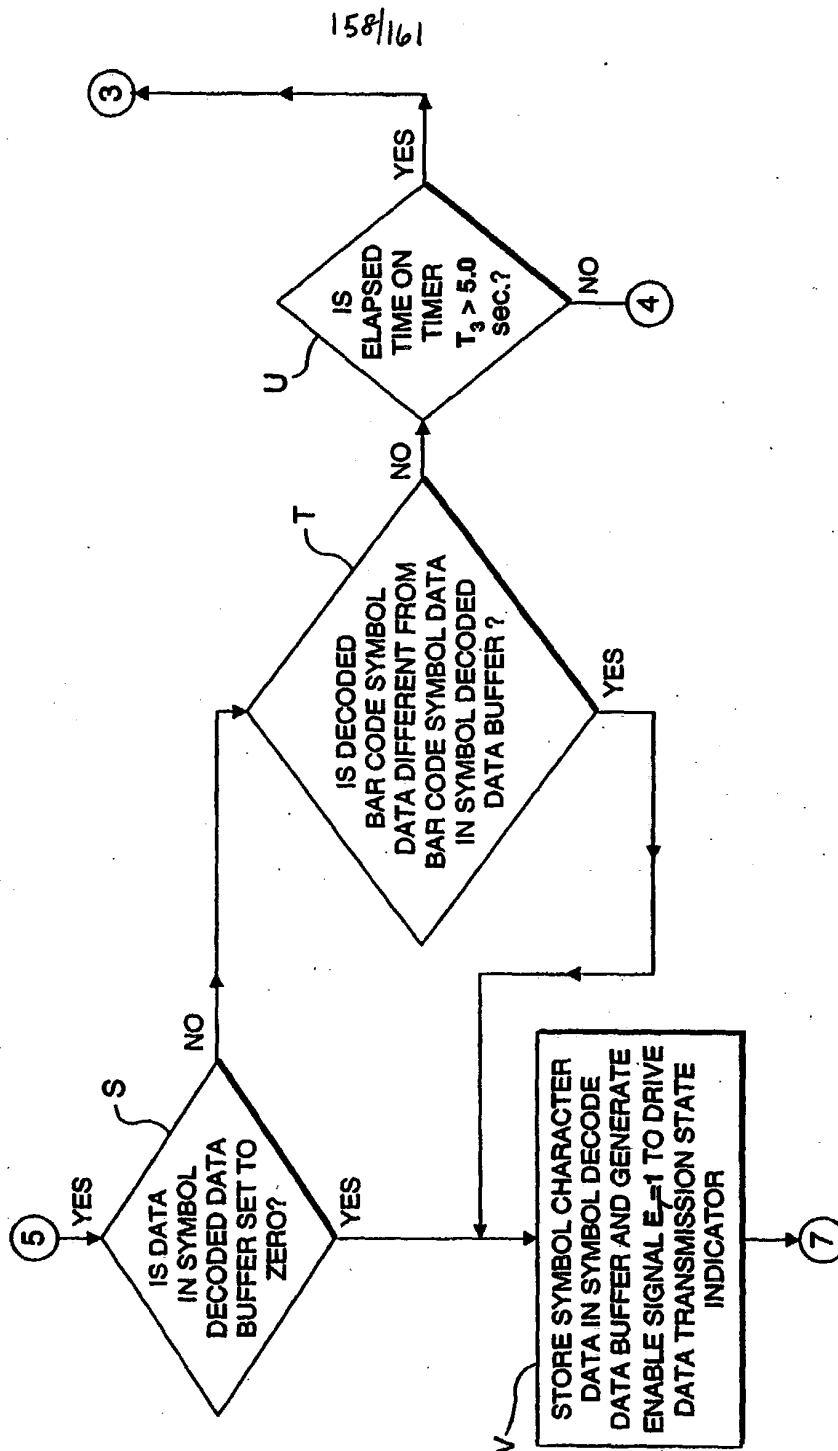


FIG. 48C1

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7

THIRD CONTROL CIRCUIT C_3 CONTINUES ACTIVATION OF LASER DIODE, SCANNING MOTOR, PHOTORECEIVING CIRCUIT, A/D CONVERSION CIRCUIT; DEACTIVATES SYMBOL DECODING MODULE; AND COMMENCES ACTIVATION DATA PACKET SYNTHESIS MODULE

W

UNDER C_3 CONTROL, DATA PACKET SYNTHESIS MODULE CONSTRUCTS DATA PACKET CONSISTING OF SYMBOL CHARACTER DATA, TRANSMITTER NUMBER, DATA PACKET GROUP NUMBER, CHECK CHARACTER AND FRAMING CHARACTERS

X

IS IN-RF RANGE CONFIRMATION SIGNAL $A_5=1$?

NO



YES

ARE DATA PACKET GROUP(S) STORED IN DATA PACKET GROUP BUFFER?

NO

Z

YES

C_3 Control Module Generates Enable Signal $E_{11}=1$ Reloading Buffered Data Packet Group(s) into Data Packet Transmission Circuit

AA

Control Module C_3 Generates Enable Signal $E_{10}=1$ loading currently Synthesized Data packet Group into Data Packet Transmission Circuit

BB

11

FIG. 48CZ

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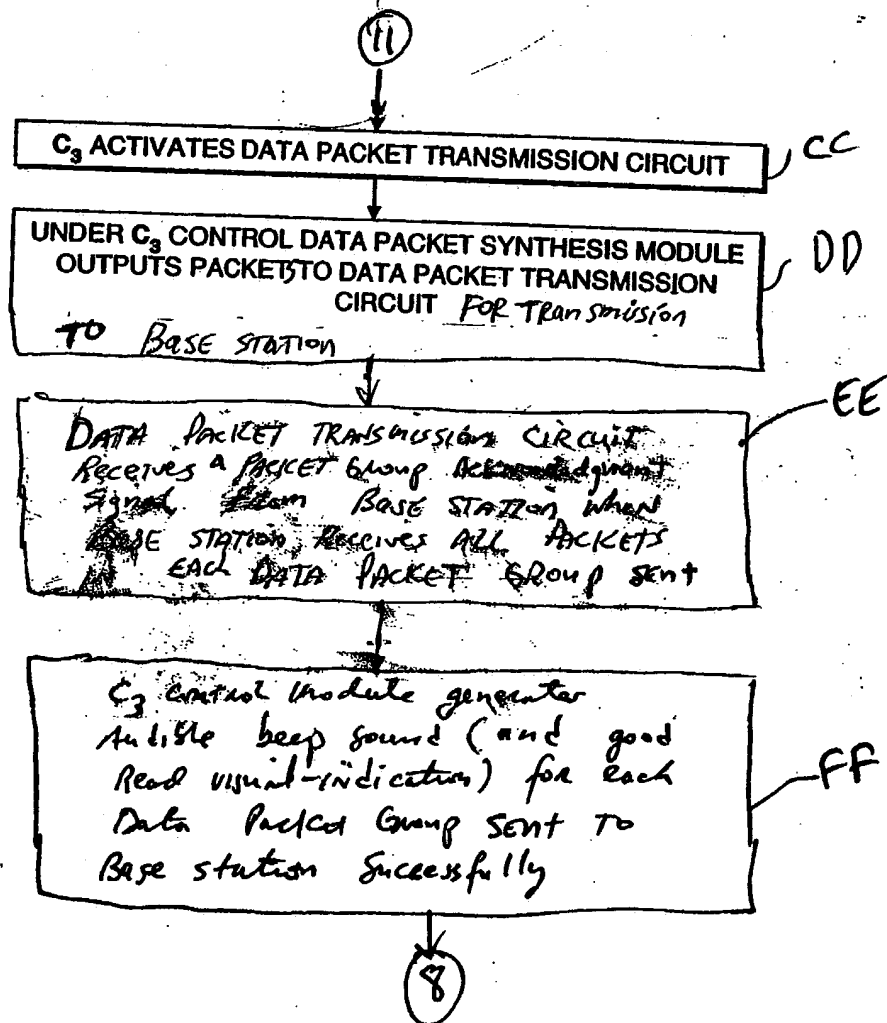


FIG. 48C3

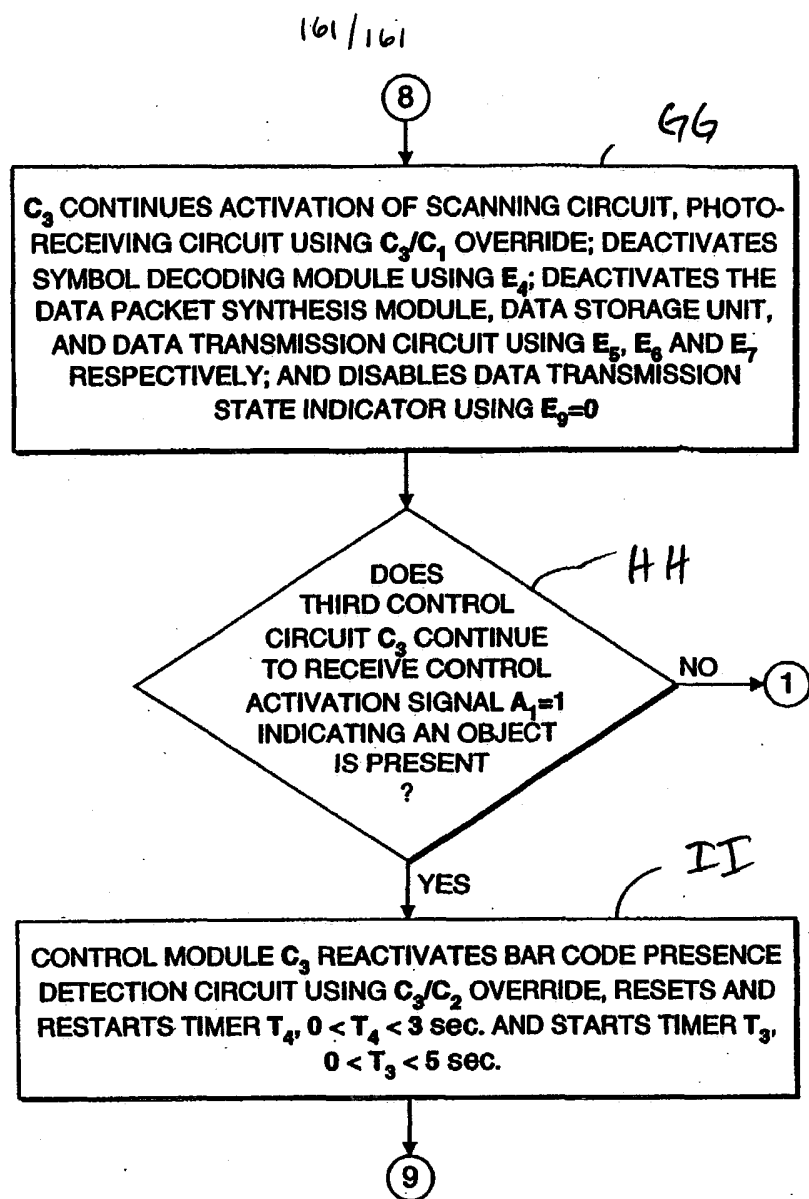


FIG. 48C4